# **Product Guide**

See what's new here.

# Introduction

The Telematics Fleet Management Application offers a robust suite of tools for managing and understanding the data sent by the Telematics Device.

# Setting Up Your Database

#### Hardware Installation

To prepare for, perform and verify your hardware installation, please read and follow <u>this guide</u> carefully. For the Limitations of Use, please visit <u>this document</u> for the most up-to-date version.

#### Software Setup

Now create a database for your fleet using the registration page. Shortly after completion, you will receive an email confirmation with a link to your database. Follow the link to log in.

**Note**: Remember that the company name entered during registration is your database name. You will use this information when you log in.

Once logged in, follow the steps below to configure your asset:

Add your vehicle	<ol> <li>Navigate to Vehicles &amp; Assets from the main menu.</li> <li>Click Add &gt; Add asset.</li> <li>Enter the Telematics Device serial number and the vehicle name.</li> <li>Click OK.</li> <li>Note: We recommend an asset name such as [Make][Model][Year] or simply the driver's name.</li> </ol>
Go for a drive	The best way to see all the great features available to you is by taking your Telematics Device out on its first trip.
View your trip	<ol> <li>Log in to your database and select <b>Map</b> from the main menu.</li> <li>Select your asset from the dropdown list to see its current location on the map.</li> <li>Click <b>Trips history</b> to see where the vehicle has been.</li> </ol>

# Quick Links

The easiest way to begin using the application is to add a vehicle and take it for a drive. Use the following links to begin setting up the most common features in the application:

- Adding a vehicle
- Adding a user
- <u>Tracking vehicles</u>
- Adding zones
- System settings

### **Setting Your Preferences**

#### Options

The application is designed to be as flexible as possible. The Options menu allows you to select a number of customizable settings to optimize the application for your needs. These options

include setting your preferences for language, units of measurement, date and time format, local time zone, and currency.

To change your personal preferences, select your account name in the top-right corner of the screen and select **Options** from the dropdown menu.

### Main Settings

#### **Regional Settings**

The most common preferences are located at the top of the <u>Options page</u>. The **Profile** setting determines the units of measurement for units displayed on the **Engine Measurements** page. Select a default profile based on your location or click **Add Custom Profile** to create a new one if there are no suitable defaults to choose from. You can change the unit of measurement used for speed and distance (kilometers or miles), the date format, the time zone, the start of the week, and the language.

The currently supported languages are English, French, German, Japanese, Italian, Dutch, Polish, Spanish, Brazilian Portuguese, Simplified Chinese, Thai, Indonesian, Czech and Swedish.

#### **UI** Settings

You can customize your home page by selecting a page from the **Default page at start-up** dropdown menu, as shown below. New users are shown the **Getting Started** page by default. After getting accustomed to the application, more advanced users may find other pages, such as the **Map** or the **Dashboard**, more beneficial.

### Map Settings

The application gives you the ability to choose which map provider to use. We offer Google Maps by default, as well as Mapbox and HERE Maps. In some areas one map provider's imagery may be more recent than another. For that reason, you can change your default view using the options below.

MAP SETTINGS		
Default map type:	Google Maps	~
Default map view:	Roadmap	~
Default zone display:	Default	~
View organizer: The view at the top of the list is the default for new maps	North America	

**Tip**: You can drag and drop your map views (blue) to order them as you want. The view at the top will be used as the initial view.

### **HOS Settings**

This menu allows you to set the appropriate settings for your fleet's Hours of Service (HOS). Your selections here determine the ruleset applied to your fleet, your home terminal, terminal address, and allowances for your drivers.

The application supports most of the current HOS regulations. Depending on where you operate your business, select the ruleset that applies to your drivers.

For a list of HOS rulesets, refer to the <u>Hours of Service Ruleset Matrix</u>.

HOURS OF SERVICE SETTINGS		
Ruleset:	No Ruleset (7-day cycle)	~
Home terminal:	100	
Home terminal address:	12 Received	/
Carrier number:		
Yard move allowed:	On Of	f
Personal conveyance allowed:	On Of	f
Maximum personal conveyance distance per day:	-0.0	km
HOS Exempt allowed:	On Of	f
Authority name:	100	
Authority address:	100180-0eek	

### Feature Preview

Feature Preview provides early insight into new features that are still in progress. These features may change, break, or disappear at any time, and we do not recommend using these features in a production setting. If you decide to test a preview feature, please consider sending feedback via the Community or your Reseller. On the **Feature Preview** tab, you can read about the features and activate the ones that make sense for your fleet.

### System Communications

Manage your system notifications under the Systems Communication tab by setting your preferences for receiving emailed reports, news notifications, and service notifications.

### Filter

When viewing the map or other components of your fleet, you can choose to view only certain groups of vehicles at a time. Use the filter box located in the top-left corner of the screen to select which vehicles are shown. To show assets in more than one group, use "or" instead of "and" when searching. For example, if you would like to see all assets in Group A and Group B, search for "Group A OR Group B." The **Advanced Groups Filter** option allows you to use more than one operator type when searching for a specific group. (Feature Preview)

•

**Note**: The filter is only visible after vehicles have been added to one or more groups. Additionally, ensure that your user account has the proper permissions to view the selected group using the filter.

### Main Menu

The **Main Menu**, located on the left, provides easy access to the Map, Vehicles & Assets, Fuel and EV Energy Usage, Zones, Rules, Administration, and other key features. To quickly find a page, use the search menu function and search by keyword or by name.

To search the menu, click the search icon at the top of the menu.



**Tip**: Use the keyboard shortcut (Shift + F) to quickly search the menu.

### Bookmarks

To gain fast access to the pages you need more often, you can bookmark up to four pages in the Fleet Management Application. To bookmark a page, click the bookmark icon next to the page title.



To access your bookmarked pages, navigate to **Bookmarks** on the left menu.



On the Mobile version, the **Bookmarks** menu is located at the bottom of the screen. It displays four features, starting with the Map, Trips History, Assets, and Dashboard — but can be customized by bookmarking other pages.

**Note:** Bookmarks are stored within individual user profiles. Your bookmarks will not be added as bookmarks for other users in your database.

# Getting Started & Help

# Community

The **Community** is a detailed resource for specific issues in the Fleet Management application. You can access it by selecting **Getting Started & Help** in the main menu and selecting **Community**. The Community allows you to connect with other community members and experts — including other users, resellers, partners, developers, and in-house experts. Here you can learn how to solve your problems, share your knowledge, learn about SDKs, and get the most from the fleet management application.

# In-App Help

**In-App Help** is a self-serve, self-supporting help and onboarding center, where you can view how-to videos, search articles, and follow guided tutorials without leaving the application. To view a tutorial, navigate to **Getting Started & Help > In-App Help** and select a tutorial from the list, or search for keywords.

# Support Services

Support Services is a full-feature support platform available directly through the Fleet Management Application. With Support Services, users can interact with support and training professionals to get help, resolve issues, or request training — all without leaving the application.

By centralizing access to technology and training providers, Support Services provides a single, compact view of tickets allowing users to search, sort and filter tickets directly in the Fleet Management Application.

For more information on using Support Services, refer to the Support Services User Guide.

### Support Tickets

Support requests can be made by submitting a ticket through the **Support Tickets** page. Once a ticket is submitted, users can follow the resolution workflow, and provide input where needed. To access the support tickets feature:

- 1. Select **Support... > Support Tickets** from the submenu.
- 2. Click Add support ticket and complete all fields.
- 3. Click **Save** to submit the ticket.

You can also chat with an agent through the **Live Chat** feature. To access the chat box, click the green **Let's Chat** button at the bottom of the Support Tickets page and begin typing.

### Training Tickets

Training requests can also be made by submitting a ticket. Users can choose from a suite of self-paced onboarding workflows, or personalized one-to-one training with an Account Training Specialist. Once a ticket is submitted, users are connected with training specialists who will customize and schedule training at the user's convenience.

To access training tickets:

- 1. Select **Support...** > **Training Tickets** from the submenu.
- 2. Click Add training ticket and complete all fields.
- 3. Click **Save** to submit the ticket.

#### Live Chat

You can ask questions to support agents in the Live Chat. To use this feature, your username must be an email address.

To start a conversation:

- 1. Select **Support...** > **Live chat with an agent** from the submenu.
- You can provide a phone number to enable the agent to contact you via phone during the support process if requested. Enter a phone number and click **Save and proceed** or click **Proceed without phone number.**
- 3. Answer the questions in the chat box to start a conversation with the agent.

#### **Contact Information**

If none of the available options suit your needs, you can also contact your Reseller using the information displayed on the **Contact Information** page.

# Additional Resources

### Product Guide

The Product Guide is the default homepage for new users and is a comprehensive guide to using the Fleet Management application. Click the arrow at the side of the page to display the table of contents for the guide and to navigate to specific sections of the guide.

#### **Release Notes**

Learn about recent changes and new features in the application by selecting **Getting Started & Help > Additional Resources > Release Notes**. This convenient resource is updated quarterly and contains a complete list of any changes or enhancements to the application, including detailed information on major features.

#### Additional Training

The **Additional Training** tab redirects you to the external training webpage detailing additional support and training options. Choose from the options at the top of the page to access How-to videos, How-to guides and training.

### Blog

You can access the **Blog** by selecting **Getting Started & Help** > **Additional Resources** > **Blog** from the main menu. This is a regularly updated resource on fleet management and telematics that covers a wide range of topics that may be of interest to users. When new features are added to the application, you can find information about them here.

# **Dashboard & Analytics**

# Dashboard

The application has a variety of options for the default home page. One of those options is the dashboard: a graphical view of your preferred reports on one page. The dashboard is intended to highlight critical events and behaviors throughout your entire fleet at a single glance. A number of reports are preselected to appear on your dashboard, but you can customize the visible reports to suit your needs.

Listed below are the built-in graphics displayed on the dashboard which help establish insights to your fleet.

Idling Violations	Displays Idling Duration and Idling Percentage. The Idling Percentage is based on the relationship between idling duration and total engine hours.
Watchdog	Helps you monitor the health of your telematics devices.
Fleet Utilization	Shows the entire fleet's distance traveled.
Fleet Distance Trend	Presents the entire fleet's distance traveled.

To customize your dashboard and select the reports you want to see, click <u>here</u>.

# **Active Insights**

Navigate to **Dashboard & Analytics** > **Active Insights** to access clear and compelling insights into your business. Using data analysis and AI models, Active Insights helps turn your data into measurable cost savings, with recommendations on what you can do to optimize your fleet. The following insights are currently available on the Active Insights page, with more to come:

Intelligent Zones	Leverages vehicle stop history to automatically locate and recommend new zones.
Electrical	Measures the health of the electrical system of vehicles in the fleet
Systems Rating	to provide a Good, Fair, Caution, or Poor ESR on a scale from 0 to
(ESR)	100.

To learn more about Active Insights, refer to the Active Insights User Guide.

### Fleet Industry Trends

Select **Dashboard & Analytics** > **Fleet Industry Trends** to view charts and analytics. This allows you to compare your fleet to industry averages in a number of different categories. Use the toggle in the top corner to switch between Metric and Imperial units.

# Мар

### Мар

To view the current location of your assets on a map, navigate to **Map** > **Map** from the Main Menu or click <u>here</u>. You can select assets to view using the Search box, or click the **Select All** button to view all of your assets. The current position of your asset(s) will be displayed on the map. To quickly zoom to your current location, click **My location** at the top of the page. The map highlights where you are with a blue circle.

You can view up to 10,000 assets at the same time on the Map using the clustered map view. Use

the **Select all** option in the asset dropdown list to display aggregate data of where your fleet is driving or stopped. This allows large fleets to view their assets in one convenient, easy map.

You can use real-time traffic data to calculate the distance between a selected location and the assets nearest to that location. **Nearest assets** technology uses a routing service to locate up to 50 of the closest assets to the selected location, then calculates the distance and the estimated time of arrival based on live road conditions. To use **Nearest assets**, zoom or navigate to an area with less than 500 vehicles and click **Nearest** at the top of the page. A pin appears on the selected area, and a list on the left of the map shows the assets nearest to that location.



Fleets with electric vehicles can monitor EV charging activity directly on the Map. A vehicle's current level of charge is indicated next to the vehicle name. Vehicles that are currently charging are marked with a lightning bolt icon.

**Note**: If you have more than 50 assets in your database, the map remains blank until you have selected assets to view from the Search box.



### Interacting with the Map

The map provides two options for interaction: left-clicking on assets and left-clicking on roads. Each interaction opens a menu of options to choose from. Some options are available in both menus.

Assets	Edit device: Open the Asset Edit page to change to the selected vehicle.	
	Show trip: Open the Trips history page to display the last trip made.	
	Assign driver: Assign a new driver to the vehicle.	
	<b>Show route</b> : View the route assigned to the asset.	

Roads	<b>Dispatch vehicle here</b> : Send a vehicle from your fleet to this location.
Both	<ul> <li>Find address: Display the street address of your selection. If no street address is available, the application uses latitude and longitude.</li> <li>Show street view: Open your selection in Google StreetView.</li> <li>Add square zone here: Create a zone at this location. The zone will be an editable square centered on your selection. You can then name the zone and change its size and shape.</li> <li>Update posted road speed: Edit the road speed for a specific road.</li> <li>Road speed detail (currently in Feature Preview): Display a pop-up message box containing the street name and posted road speed.</li> <li>Nearest: Find the nearest vehicles to your selection.</li> <li>Navigation: On the mobile app version, click Navigate to asset, Navigate to zone, or Navigate here to open the map app of your choice and get directions when travelling from one destination to another.</li> </ul>

#### Assigning Drivers

When assigning a driver to a vehicle on the Map, users have the option to assign a driver for all subsequent trips until the driver is manually changed again, or only for the next trip.

When choosing to assign the driver for all trips, the driver will be assigned to the vehicle until:

- The driver is assigned to another vehicle.
- Another driver is assigned to this vehicle.
- The driver is unassigned from this vehicle.

When choosing to assign the driver only for the next trip, the driver will be assigned for the subsequent trip, after which the driver is unassigned from the vehicle. When the trip is over, all future trips will be unassigned.

In both cases, the newly assigned driver will appear on the live Map as the vehicle's driver as soon as the system updates the change.

Assign driver	×
Current driver: <b>None</b> Assigning a new driver will remove the curr vehicle and remove the new driver from the Select new driver:	rently assigned driver from this eir currently assigned vehicle.
Search for a driver	•
Assign driver:	
For all trips until changed	Only for current trip
	Cancel Apply changes

### **Dynamic Map Elements**

The colors for assets icons are assigned automatically from a predefined palette.



The first asset takes on the left-most color, the second asset takes on the next color in the order,

and so on. If there are more assets than colors in the palette, the assets will take on lighter or darker variants of the colors in the palette. No two asset icons on the map will have the exact same color.

Moving assets have an additional glow effect to differentiate them from stopped assets. EVs display the vehicle's state of charge beside the vehicle name regardless of movement.



When an asset is classified as not communicating, its color is set to gray. An asset is considered to be not communicating if one of the following conditions is true:

- 1. The installed Telematics Device is a legacy device and has not communicated for a minimum of 72 hours.
- 2. The installed Telematics Device is not a legacy device and:
  - a. The most recent communication indicates that the asset is moving and the last contact was more than 10 minutes ago; or
  - b. The most recent communication indicates that the asset has stopped and the last contact was more than 24 hours ago.

### Map Icons

The **Map** feature uses a variety of icons to indicate asset behavior and provide options for viewing data. Some common icons used include the following:

Square	Indicates the location of an asset stop outside of company zones. Hovering over the icon displays the address of the stop and the asset's arrival time. If the stop indicates the current location of the asset, it is labelled with the asset name and driver.
Star	Indicates the location of an asset stop inside a company zone. Hovering over the icon displays the zone name, address, and type, as well as the asset's arrival time.
Triangle	Indicates a currently driving asset. Hovering over the icon displays the asset's location and current driving speed.
Broom	Represents the <b>Remove all</b> feature. Any button with this icon will remove all instances of the specified object from the map.
Green check	Represents the <b>Select all</b> feature. It appears in the map <b>Legend</b> when you have removed all exceptions from the map. Clicking it repopulates the map with the cleared exceptions.
Red triangle	Marks an instance of an <b>exception</b> that is too short to indicate with a colored line. Hovering over the icon displays the asset name; driver; the type of exception; and the location and time at which it occurred.
Blue arrow	Appears at the far right-hand side of the <b>Legend</b> to indicate that

	there are further <b>Exceptions</b> that cannot be displayed in the legend due to size constraints. Clicking it displays a list of the remaining exceptions.
Lightning bolt	Represents the <b>Charging</b> feature. It displays next to any electric vehicles that are currently charging. The vehicle's state of charge (SOC) is displayed next to the vehicle name.

If you are unsure what an icon indicates, consult the **Legend** at the bottom of the map. Most icons are labelled there for easy reference.

# Map Options

#### Searching the Map

The search box on the Map page simultaneously searches:

- Asset name;
- Drivers;
- Addresses;
- Zones;
- Customers;
- License plate numbers;
- Routes; and
- VINs (Vehicle identification numbers).

The dropdown arrow to the right of the search box is used to browse assets and groups. Selecting the asset will show its current position on the map. You can search for and select more than one asset at a time. For address search, the predictive text capability helps you choose from three suggestions based on current proximity on the Map after you enter a partial address or waypoint.

#### Map Dropdown

#### Group Highlighting

The **Highlight groups** setting will set all asset icons belonging to a specified group to the group's predefined color and all excluded assets to gray. Both the descriptor text and the relevant side-menu entries will be set to match the group's color to indicate the group's participants.

To highlight groups:

- 1. Click the **Map** button located in the top menu.
- 2. Select Highlight groups.
- 3. Choose the group you wish to highlight.
- 4. Selecting **Map** > **Views** > **Save this view** from the top menu to save your view of a highlighted group.

#### Views

The map view changes to show the new locations of driving vehicles each time it auto-refreshes. To prevent the map from changing, select **Map** > **Views** > **Lock this view**. When the map auto-refreshes, it will not change the current view. Select **Map** > **Views** > **Save this view** to save specific map views for returning to areas of interest quickly.

#### Мар Туре

The application supports a variety of maps, allowing you to select the most useful map for your area of interest. You can change the map you use at any time by selecting **Map** > **Map Type**, then

selecting one from the list of available providers.

Refer below for a feature comparison between our map providers. For a more detailed list, click <u>here</u>.







- Road and satellite maps
- Street View maps
- Supports touch
- Arrows denote travel direction for one-way roads
- Road and satellite maps
- Open source
- Supports touch
- Road and satellite maps
- Supports touch

#### Using Custom Maps

The application supports custom maps. This powerful feature allows your organization to design business-specific maps that combine with the application's vehicle information. Some possible usages include maps that show customer-centric information, underground water flow, municipal boundaries, or city infrastructure (power, roads, sewage, etc).

The application supports custom map implementations based on OpenLayers, such as:

- ArcGIS 9.3 REST servers;
- MapQuest;
- CloudMade; and
- Tilemill.

Get started with custom maps by setting up your own tile or ArcGIS server.

When using the application, all trips, exceptions and zones will appear on your custom maps. After the custom map has been configured, it can be selected for use from **Administration** > **System...** > **System Settings** under the **Maps** tab.

#### Show Traffic

The **Show Traffic** menu option acts as a toggle to display traffic information within the map. When the toggle is **On**, roads on the map will be colored according to traffic density. Green indicates normal traffic levels, while yellow, orange, red, and burgundy indicate increasing levels of traffic.

#### Show Legend

The **Show legend** menu option acts as a toggle to display the **Legend** at the bottom of the screen. When the toggle is **On**, the legend with map icons is displayed. For more information on asset icons, see <u>Map Icons</u>.

#### Show Routes

The **Map** tab allows you to create and display routes for your vehicles. From the map view, select **Map** > **Show routes** to toggle the visibility of routes on the map. To create a new route, click the arrow beside the **Show routes** button and select **Add route**. You can then create a new route by selecting zones on your map or by adding waypoints at desired locations.

To view previously created routes, simply select the **List routes** option. This opens the **Routes** page, where you can select a route from the list to display it on the map. To learn more about creating and customizing routes, see <u>Routes</u>.

Show Zones

You can choose to display or hide zones on the map by selecting the **Map** button and toggling **Show zones On** or **Off**. For additional visibility options, select the **arrow** beside the **Show zones** button. The default settings displays only zones that have the **Visible on map** setting set to **Yes**. To display all zones (regardless of their settings) toggle **Show hidden zones** to **Yes**. You can also filter zones by type by selecting the type of zone you would like to exclude from the **View zones by type** list.

**Note**: Zones are used to denote areas of interest such as customer areas, workplaces or people's homes and can be used in exception reporting. To learn more about using zones, see <u>Zones</u>.

#### Show Label

You can hide the vehicle name and/or the driver name to make it easier to visualize spots on the map where your fleet has many vehicles in proximity (e.g. a parking lot). Select the arrow beside the **Show label** button on the vehicle dropdown list to choose the labels you want to see on the map. If you choose not to display the vehicle and/or driver name, you can still hover your mouse to view the information on each vehicle.

# Trips

### **Tracking Vehicles**

Vehicles installed with a Telematics Device generate automatic save records called trips when the vehicle is driven. Depending on the vehicle in which your Telematics Device is installed, an individual trip will be based on many factors.

A trip is defined as the vehicle's activity from the time it begins moving to the time it finishes a stop. A stop is recorded when the vehicle ignition is turned off, or when the vehicle has a speed of less than 1 km/h for more than 200 seconds. Short stops lasting less than 200 seconds are not counted as stops if the ignition is not turned off (such as stopping for red lights). A trip starts the first time a vehicle moves because vehicles may, at any time, be started and remain stationary for a period of time.

The Telematics Device can also detect when a vehicle is idling; that is, when the engine is running while the vehicle remains stationary. Idling that occurs before a trip starts is included as idling time for the previous trip.

Due to differences in vehicle manufacturers, it is not always possible to determine if the vehicle ignition is turned on or off. For this reason, the Telematics Device attempts to detect the engine running in the following three ways:

- When the engine "ON" status is detected via the CAN bus;
- When there are voltage fluctuations (where no CAN is available); and
- When movement is detected (where neither RPM nor voltage fluctuation are detected.)

The following examples illustrate how trips are calculated.

Example A — Time Spent Idling Before and After Driving



In this example, let's assume time A and D are times spent idling. Therefore:

#### Previous trip idle time = A

Current trip = B + C + D

#### Current trip idle time = D

Example B — Time Spent Idling in One Trip



In this example, let's assume time B and D are times spent idling. Therefore:

#### Current trip = A + B + C + D

#### Current trip idle time = B + D

Example C — Time Spent Idling During Two Trips



In this example, A+B is the first trip, and C+D is the second trip. The idle times are B and D where B is attributed to the first trip, and D is attributed to the second trip.

### Types of Tracking

#### Standard Tracking

Locations of assets on the map are refreshed every 15 seconds, based on the last known position of the telematics device. If the position cannot be transmitted (due to issues such as underground garages or poor coverage, for example) the display update may be delayed. You can obtain more information by hovering your cursor over the asset to display the status, name, and address of the device.

#### Active (Near Real-Time) Tracking

Devices subscribed to an Active Tracking plan deliver positional updates at a higher frequency. With Active Tracking, asset locations are refreshed every second for up to 20 moving assets displayed on the map, providing continuous animated movement. Live server-side driver alerts are also enabled by turning Active Tracking on.

**Note**: Active Tracking is only available on the ProPlus plan. By turning this feature on, devices subscribed to the Pro plan are **automatically upgraded** to the ProPlus Plan (with all associated charges.)

#### No Tracking (Personal Mode)

Personal mode allows drivers and fleet managers to temporarily hide asset tracking in the Fleet Management Application. When Personal Mode is assigned to an asset, features that use GPS such as position, trips and speed profiles are hidden, while features that do not use GPS such as engine and accelerometer data remain visible. Since GPS data is not accessible in Personal Mode, other features such as reports may not function as expected.

Personal Mode is intended for market-specific cases in which the driver requires intervals of privacy such as using a work vehicle for personal time. Personal Mode should not be used in conjunction with compliance features such as Hours of Service (HOS) or International Fuel Tax Agreement (IFTA) reporting.

There are two ways to enable Personal Mode:

Exception Rules	Set conditions to automatically turn Personal Mode on and off, e.g. after work hours rule.
Marketplace Add-In	Install the Personal Mode Add-In to manually toggle Personal Mode on and off while using the Fleet Management Application, or the Drive App.

For more information on using Personal Mode, refer to the <u>Personal Mode User Guide</u>.

#### Area Activity Search

From the Map, you can explore what activity occurred in a selected area during a specific period of time by zooming in to that area. Click your desired location, select **Area Activity**, and enter a date and time range. The application opens the **Trips History** page, where you can see which assets were active in the area and any trips that occurred during that time.

**Note**: You may need to adjust your zoom level before the Area Activity feature becomes available.



Examine where the driver is spending their time by hovering your mouse over the pie chart. Hover your mouse over the green distance line of each driver to see the percentage of distance compared to the longest distance traveled.

എ 629 km	629 km
	629 km — 100% of longest distance travelled

You can examine the idle time compared to the overall drive time by hovering over the pink line.

Θ	8h 0m 26s Driving	1h 15m 49s Idling
$\sim$		

Download the full Trip Summary Report using the **Report** option in the top menu.

### **Trips History**

Within the application, you have access to the real-time locations of your fleet as well as a full history of where each asset has been. You can use this feature to view and manage previous asset activity. Navigate to **Map** > **Trips History** to work with archived asset (historical) tracking.

When using Trips History, your selected assets display their trips automatically. The table shows

driving time and stopped time for each trip in separate rows.

Stops are labelled with the zone name (if the stop occurred within a known zone), or with the stop address. The stop duration and the idling time are listed to the right of the label.

Driving time has no label but is highlighted with a gray background. It shows the times at which the asset was driven, the duration of driving, and the distance driven.



**Note**: Zone names are used in addition to addresses after you have created zones for customers' locations, workplaces, or other places of interest.

If the location is a zone, the page displays a colored zone icon next to the zone name. In the example above, the green zone icon indicates a Home zone, while the orange zone icon indicates a Work zone.

The list of trips also shows when the vehicle arrived, how long it was stopped for, how long the trip lasted, and the distance that was driven over the course of the trip.

#### Mapping Archived (Historical) Trips

Selecting an individual trip adds the trip to the map. Selecting additional trips will show all the selections simultaneously. The selected trips do not need to be consecutive. Selected trips are numbered to the left of their address or zone name indicating the trip's order in the sequence. The number corresponds to the number indicated on the map. In the example below, 3 trips are selected.



**Tip**: Easily add all trips for the day by selecting the date button.

Click the ellipsis tool to the right of each trip to view options to Edit device, Assign driver, Show

**speed profile** for that trip, or **Show Log Data and Collisions**. For more information on editing a device, click <u>here</u>. For more information on a vehicle's speed profile or log data, click <u>here</u>.

An automatic legend is shown at the bottom of the map which denotes important events along the trips.

The stops and the exceptions that occurred during the trip are shown on the map. You can filter the exceptions on the map by selecting or deselecting one of the areas from the smart legend.

🔲 Stopped 🛧 Stopped inside zone 🦻 Charging 🌭 Remove all 🚃 Harsh Cornering 📩 Leaving Zone 💶 Entering Zone

The trail line of the vehicle is color-coded with the exception type which occurred. When multiple exceptions occur, the color will alternate in a banding pattern. If the exception line is too short to be visible, a warning triangle is used in its place.

The direction of travel along the trip is denoted with arrows. A star with a number indicates a stop inside of a known zone, and a square with a number indicates a stop outside of a known zone.

**Note**: A star is only visible to members of the group in which the zone was published. If the device is not a member of the group, the zone is unknown and the stop remains a square. For more information about map icons, click <u>here</u>.



By moving your mouse along the trip, additional information about your selection is displayed including:

- Asset name
- Time, date, and address
- Movement status
- Exceptions
- Road speed

If the telematics device does not record any GPS coordinates during a span of the trip, this segment is estimated and displayed in a different color. When you hover your mouse over this segment, a message says it is estimated.



When viewing trips on a map, the main menu automatically collapses to allow for more room to

view the map. To re-open the main menu, click the arrow located above the main menu.

**Note:** You can choose to view the vehicle's previous trip as well as the vehicle's current position during a trip in progress at the same time by setting **Always show latest trip and current trip in progress** to **On** from the **Options** menu.

### Show Replay

The Replay feature allows you to replay trips for single or multiple vehicles to better understand how the trip progressed. From the **Trips History** screen, select the trips you want to replay and choose **Show replay** from the **Map options** dropdown list. While watching the animated trip history you can click play or pause at any time. You can also change the replay speed and use the timestamp bar to jump to a desired section of the trip.

### **Trip Summary**

From within the **Trips history** view, click the **Summary** button to view summarized trip information for your fleet.

Search 🔹 0	ptions 🔻 Summary	Live positions	Report 🔻
------------	------------------	----------------	----------

The trip summary view allows you to compare essential driving data for your entire fleet. By default, the asset list is sorted based on the distance driven for the specified time period. The chart on the right side shows the duration of stops inside customer, office, home, and non-customer zones.

#### Back to Top

# Vehicles & Assets

The **Vehicles & Assets** page allows you to monitor assets in your fleet and adjust settings for individuals or groups as needed. Each asset in your fleet is displayed in a list format, with key information displayed alongside the asset name. Icons beside the asset name represent different statuses:

<b>(</b>	Active with a tracking device.
<b>&gt;</b>	Active without a tracking device.
<b>₩</b>	Archived.

Selecting an asset from the list allows you to enable and configure driver feedback, view the asset on the map, or adjust asset settings. These features allow you to customize feedback for each asset in your fleet based on unique needs and to monitor your fleet at a single glance.

# **Asset Configuration**

The **Vehicles & Assets** page (**Menu** > **Vehicles & Assets**) displays the assets in your database and allows you to add new assets or to modify the settings of existing ones. The **Vehicles & Assets** page also allows you to show, hide, or rearrange columns to organize your assets currently in Feature Preview. You can customize the information display for your assets using the **Column** option on the far right.

Adding an Asset

Click **Add** and select **Add asset**. The **Add Asset** page allows you to pair your telematics device serial number with a description of your asset. Select **OK** at the top of the page to complete your addition. You can also add an asset into the application without a serial number, but the functionality will be limited.



Mobile device users can use their camera to scan the asset's serial number. Tap the camera icon to scan the barcode.



**Note:** Some vehicles sound an alert if any On-Board Diagnostic (OBD) third-party device requests data via the OBD port while the vehicle is locked and the ignition is off. As of firmware version x.27.x, Telematics Device version 9 disables this alert by default in order to provide full access to data according to the rate plan, without risk of sounding the alert. For more information, including how to verify and control the alert's status, please consult the <u>OBD Port Audible Alert</u> <u>FAQ</u>.

#### Importing Multiple Assets

Multiple assets can be imported at the same time using the Quick Import tool. Select **Add** and then **Quick import** to open a new dialog. In the text field, enter one device serial number, along with a brief description of the device per line. You also have the option to include the VIN/PIN number when importing assets. Click **Import** to begin importing your devices.

**Note**: If an asset does not have a VIN, OEM data providers will assign a unique PIN to the asset. Common examples of assets without VINs include earth-moving equipment such as bulldozers and excavators.

#### **Requesting Replacement Devices**

When devices in your database become eligible for replacement, you can request a replacement directly from the application. You can view which devices are eligible for replacement by clicking the **Filter** dropdown menu in the top menu on the **Vehicles & Assets** page, and selecting **Require replacement**. All assets equipped with devices eligible for replacement are marked with a red icon.

To make a replacement request, select the devices you would like to replace and click **Request replacement** from the top menu. The application automatically determines whether each device you select is eligible for a free replacement; devices that are not eligible are highlighted in red for your convenience. If you are satisfied with the list of devices for replacement, click **Send request** at the bottom of the popup window to complete your request.

**Note**: The device replacement feature is only available for databases that include devices eligible for replacement. If your database does not contain eligible devices, this feature will remain

unavailable.

#### Editing an Asset

Select an asset from the list to access the **Asset Edit** page. Here you can edit the device information, the driver feedback options, Wi-Fi settings, and the groups to which the asset belongs.

**Note**: Wi-Fi functionality is only available on Telematics Device Version 9+. You must first accept the Wi-Fi EULA (End User License Agreement) to access these settings. For instructions on how to enable and connect to the Wi-Fi hotspot, click <u>here</u>.

#### Asset

The **Asset** tab of the **Asset Edit** page provides basic options for configuring the telematics device for your vehicle. Many of these settings are automatically populated for you (such as device type), but others can be customized for your needs. It also includes a quick summary of the asset, such as its current location, fuel consumption, and more.

The **Asset** tab allows you to add that particular asset to existing company groups. You can also choose to add the asset to a messaging status group to allow driver behavior notifications to be sent to that asset.

Messaging status groups allow drivers with Garmin-equipped vehicles to notify their team of changes to their working status using common statuses. For example, when a driver has completed a task and requires new work, they can set their status to available. This status update can then be used by dispatch to select the most relevant driver for a task based on availability as well as location.

Other common statuses are:

- Available, Busy, Do not disturb;
- Assistance needed;
- Emergency; or
- On-call.

To use messaging statuses, you must first create the appropriate groups using the **Groups** page. For more information on creating groups, see <u>here</u>.

Once you have created the appropriate groups, you can add them to an asset under the **Asset** tab of the **Asset Edit** page. Simply select the statuses you want to apply to the asset from the **Messaging status groups** dropdown menu.

Each asset can have up to four available statuses for the driver to select from.

Once the statuses are saved, the driver's in-vehicle Garmin will be updated. They can set their current status by selecting **Quick Message**. When viewing the map, driver status will be displayed in the information popup when hovering over their current location.

Clicking the **Current Status and Installation Info** button opens the **Device Status** page. This page shows a variety of information about the device, including its last engine record, the time of its last communication, and a timeline of the device's installations.

If you have made changes to your device settings during your session, a message displays across the top of the screen explaining that changes are pending. When the device has been updated and the changes are made, the message disappears.

#### Health

On the Health tab you can see information about the asset's health, including active faults, maintenance history, upcoming events, inspection logs, and more.

#### Audio Feedback

Audible in-vehicle alerts can improve the on-road driving behavior of your drivers by notifying them of unsafe or potentially risky driving events. You can configure alerts under the Audio Feedback tab to sound on a number of events, including unbuckled seat belts or speeding. If an event is triggered, the driver will need to correct their on-road behavior for the alert to cease. Audio feedback includes audio feedback accessory settings. You can also set up the duration of the Driver Identification Reminder under the Audio Feedback tab (only for Telematics Device version 9 and above).

While all audio feedback settings are enabled and disabled using an On/Off toggle, individual settings may have specific input fields for fleet managers to set a minimum threshold for feedback.

Most settings are self-explanatory. Adding feedback for excessive idling requires the fleet manager to designate an acceptable length of time, after which the device will register idling as excessive. The speed warning similarly requires specifying a speed at which the vehicle is considered to be speeding.

The dangerous driving feedback setting is adjusted using a sliding scale and three vehicle classes: **Passenger Car**, **Truck/Cube Van**, and **Heavy-Duty**. Passenger Car refers to ordinary passenger vehicles; Truck/Cube Van to typical delivery type trucks or other step-side vans; and Heavy-Duty to larger box trucks and tractor trailers. Since extensive testing has revealed that these different classes of vehicles react to G-forces differently, the sliding scale allows you to customize the feedback precisely for each vehicle in your fleet.

The table below provides guidelines for the average G-force exertions for various vehicle classes. While the default values found in the application are generally suitable, they are easy to customize.

Event	Passenger Car (G)	Truck/Cube Van (G)	Heavy-Duty (G)
Harsh Braking	< -0.61	< -0.54	< -0.47
Hard Acceleration	> 0.43	> 0.34	> 0.29
Harsh Cornering	> 0.47 & < -0.47	> 0.4 & < -0.4	> 0.32 & < -0.32

**Note:** When viewing **Harsh Cornering**, negative values represent acceleration to the right and positive values represent acceleration to the left.

We recommend starting in the middle of the specific vehicle class and adjusting from there based on fleet objectives and the unique aspects of your fleet. As the slider moves from left to right through all the vehicle classes, the monitoring becomes more sensitive. When the slider is set to the least sensitive setting for passenger vehicles (far left) it is using the most lenient monitoring and only the most aggressive events will trigger driver feedback.

The function and location of the vehicle in question are key factors in adjusting the sensitivity of driver feedback. For example, an ambulance is likely to be more closely monitored than a delivery truck, while an urban vehicle is likely to be more sensitive than an off-road vehicle. We recommend that the fleet manager monitor the readings and adjust sensitivity based on their real world experience.

#### Rate Plan

The **Rate plan** tab displays the various plans offered with the Fleet Management application and the features of each at a glance. The current plan associated with the asset is highlighted in blue for easy comparison with other plans.

#### **Extended Services**

The **Extended services** tab allows Administrators to extend telematics device data from their vehicles to databases from other organizations.

#### Settings

The **Settings** tab displays additional settings that allow for more specific and complex functions, such as when using external devices alongside the telematics device. Open the **Advanced** menu to see the following settings:

Timezone	Specifies which timezone the user is operating in.
Work time	Allows the Administrator to specify what kind of work time the user follows. Selecting an option from the dropdown menu allows the application to more accurately determine when an asset is being driven during office or personal time.
Turn GPS receiver off	Specifies the length of time the GPS receiver remains active after the ignition is shut off. The default setting is for the GPS to deactivate immediately upon ignition shut off. You may want to modify this as keeping the GPS on can improve tracking on older devices when many stops are made.
Turn external device off	Allows the Administrator to control how long external devices, such as Garmin or Iridium, are left on after the asset is turned off.
Hours of Service (HOS)	Allows the user to turn HOS settings on and off for an asset, as well as to set the application to automatically recognize when an asset is using HOS features. When using this setting, the application will use data from the telematics device to automatically record duty status logs when the asset is detected to be in motion.
Sleeper berth equipped	Enables the <b>Sleeper Berth</b> status for HOS drivers. This allows the fleet manager to ensure that only drivers with access to a sleeper berth in their asset have the access to this status.
Fuel tank capacity	Allows for manual input of the total fuel capacity for assets with more than one fuel tank. This can have a significant impact on the accuracy of fuel reporting.
Automatic vehicle management	Allows the system to determine which vehicle is using which device. The device serial number is automatically assigned to the appropriate asset in the database.
Periodically wake GPS	Enables waking up the GPS while the asset is parked. This triggers a faster GPS latch when the asset begins a trip. Enabling this feature drains the asset's battery at a faster rate and should not be done for newer devices.
Active Tracking and live server-side driver alerts	Turning this feature on allows the device to deliver positional updates more frequently. With Active Tracking, asset locations are refreshed every second for up to 20 moving vehicles on the

map, providing continuous animated movement. Live server-side driver alerts are also enabled by turning Active Tracking on. Active Tracking is only supported by devices subscribed to the ProPlus plan. By turning Active Tracking on, you are subscribing to the ProPlus plan with all associated charges. Once Active Tracking is turned on, you cannot reverse your subscription simply by turning it off again.

### Removing an Asset

To remove an asset from your database:

- 1. Select the asset you wish to remove on the **Vehicles & Assets** page.
- 2. Select **Remove** from the top menu of the **Asset Edit** page.
- 3. Confirm your selection by selecting **Delete** on the dialogue box that appears.

Deleting an asset from your database permanently removes all data associated with that asset. If you would like to remove an asset, but do not want to delete the data associated with it, you can archive the asset by clicking **Unplug device** on the **Asset tab** of the **Asset Edit** page.

**Note**: Deleting an asset from your database does not automatically deactivate billing. Please contact your Reseller to make the appropriate billing changes.

### Installation History

The installation history for all vehicles can be accessed from the **Vehicles & Assets** page by selecting **Installation history** from the **Installations** dropdown list on the top bar. The Installation History is a report that displays the data that was recorded when the device was initially installed in the vehicle. This can include information such as the date of installation, the name of the installer, and the serial number of the device. You can select which columns you want to see on the report by clicking **Columns** to open the dropdown list.

### New Installed Devices

You can check new installation records from the **Vehicles & Assets** page by selecting **New device installation** from the **Installations** dropdown list on the top bar.

### Watchdog Report

The watchdog report helps you focus on vehicles which warrant deeper examination. If a vehicle is not moving, or has not communicated for a period of time, it may be perfectly fine (for example, parked for a battery change), or it may be experiencing issues.

Different types of communication messages are sent by the vehicle's Telematics Device. When a vehicle is running, it sends trip report messages which include its location. When a vehicle is turned off, heartbeat messages are sent. For the first 48 hours a vehicle is turned off, a heartbeat message is sent approximately every half hour. After that, heartbeat messages are sent every 23 hours. (23 hours instead of 24, so that the time the message is sent will rotate.) All types of messages rely on network communication. A vehicle is considered to be not communicating if no messages of any sort are being sent. Archived (historical) vehicles are excluded from the report.

To access the report, select the **Vehicles & Assets** option on the left-navigation menu of the main application page. Select the **Report** dropdown menu and select **Watchdog Report**. You can view the list, download a PDF, or download an Excel spreadsheet with the same information. The latter provides the most flexibility. The Excel version of the report has 3 visible tabs.

Report Tab

Each row in the Report tab provides the following data:

Vehicle	Vehicle name
Group	Vehicle group(s)
Last Known Address	Last communicated location. If the vehicle is active, but the Telematics Device is not communicating, then the vehicle's actual physical location will be different. If the location is resolved to a zone, the entire address field will be displayed in a blue font, including the zone name(s) and address. If it does not resolve to a zone, then the address will be listed in black.
Last Communication Date	The date and time of the last device communication, heartbeat or otherwise, if delayed. To declutter the report, the date is left blank for vehicles with an "OK" status.
Days Since Moved	Number of days from the date on which the vehicle last communicated location information (trip report) to the time at which the report was produced, if delayed. To declutter the report, the date is left blank for vehicles with an "OK" status.
Days Since Communicated	Number of days from the last date the vehicle communicated any type of record, to the last date the report was produced. As long as a vehicle has network coverage, it will continue communicating "heartbeat" message logs, even if the vehicle is turned off. If the vehicle was turned off and not moving while the device continued to communicate heartbeat messages, but stopped a week later, then <b>Days since moved</b> and <b>Days since communicated</b> will be a week apart. If both trip and heartbeat communication failed at the same time, then the dates will match.
Serial Number	Serial number of the Telematics Device in the vehicle.
Status	Interpretation of the vehicle's status, based on the Last Communication Date and the customizable parameters to set time ranges. Refer to the knowledge base article for more information on customizing this report.
Map View	Quick link to display the vehicle on a map. Only selectable in the PDF or Excel reports — not the application interface.

#### Chart Tab

The chart tab shows a graphical view of the status. The number labels for each section of the graph are the actual number of vehicles in each category, **not** the percentage.



#### Summary Tab

The summary tab shows a vehicle-by-vehicle list of the vehicle status and the days since last communication.

# **Extendable Services**

Extendable Services is a secured technology that allows users to connect and collaborate with trusted business partners by extending their telematics data to other Fleet Management application users. With Extendable Services, users can extend safety and performance-driven data with insurance providers to save on coverage, or engine diagnostic data with maintenance providers to save on repairs.

Extendable Services starts with a transaction between two Fleet Management Application users; a user from a Primary Database who makes a request to extend telematics services, and a user from a Target Database who accepts or rejects the request based on the needs of their business.

To extend a service, both sender and receiver must have accounts in the Fleet Management Application. The Extendable Services feature is available under the **Extended services** tab on the **Asset Edit** page. To learn more about the Extendable Services feature, refer to the Extendable Services <u>User Guide</u>.

# Activity

### **Risk Management**

The **Risk Management** report allows you to compare driving behavior across vehicles, drivers, and groups. The report is generated based on the exception rules you choose to enable in the Fleet Management application.

Select **Activity** > **Risk Management** to access the options for running the report. Click the **Exception rule** text box to open a dropdown menu of available enabled exception rules.

The **View by** and **Run report by** options allow you to filter how you see results. Viewing the results by **Vehicle** allows you to see all exceptions generated by a vehicle regardless of driver; viewing the results by **Driver** allows you to track a driver's behavior across multiple vehicles.

In both cases, you will need to have the **Run report by** option set to **Individual vehicles or drivers** to see these results. Setting this option to a particular group displays only data for that particular group regardless of whether the **View by** option is set to vehicle or driver.

Options • JF Sort by: Name	e 🔹 Report 💌		
Date Period	Display Options		
Today			
Yesterday	Exception rules		
This week	View by	Vehicle	Driver
Last week	Hide zero distance	Yes	No
This month	10ws		
Last month		Individual vehicles or drivers Company group	
Custom			
Sub-periods	Run report by		•
On Off			
			Apply changes

Select the **Report** option from the top menu to view options for downloading the report as a PDF or Microsoft Excel file.

# **Speed Profile**

Navigate to the speed graph by selecting **Activity** > **Speed Profile** from the main menu. The Speed Profile page can also be accessed from the **More trip options** menu (found to the right of each trip) on the **Trips History** page.

After selecting the appropriate vehicle and date range, click **Apply changes** to view the graph. The blue line of the graph shows the speed of the vehicle; the red line shows the known speed limit for the area; and the yellow line shows an estimated speed limit in the absence of a known speed limit.

Speed Profile Vehicle 1 Show Help
Logged speed (km/h) Speed limit (km/h) Speed limit – estimated* (km/h) 11/09/20 19:15:47 - 11/09/20 19:26:25
11/09/20 19:20:28
60 km/h
45 km/h
19:16 19:17 19:18 19:19 19:20 19:21 19:22 19:23
* - Estimated speed limits are crowd-sourced and may not reflect the actual posted road speed.

# Speed Limit Data Providers

This allows street level accurate notifications to be sent when a driver exceeds local speed limits.

Posted speed limit data comes from OSM Maps.

### Road Speed Data Availability

The application supports posted road speed data in the following countries:

- North America: USA, Canada, Mexico
- **Oceania**: Australia, New Zealand
- **Asia**: Brunei, China, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, Uzbekistan, Vietnam
- **Europe**: Albania, Andorra, Austria, Azerbaijan, Azores, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Crimea, Croatia, Cyprus, Czech Republic, Denmark, England, Estonia, Faroe Islands, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Northern Ireland, Isle of Man, Italy, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Scotland, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, Wales
- **Caribbean**: Bahamas, Barbados, Cuba, Dominican Republic, Jamaica, Puerto Rico, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Trinidad and Tobago
- Central America: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama
- **South America**: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela
- Africa: Botswana, Cameroon, Democratic Republic of the Congo, Gabon, Gambia, Ghana, Guinea, Ivory Coast, Kenya, Madagascar, Malawi, Mali, Mozambique, Namibia, Nigeria, Sierra Leone, South Africa, Tanzania, Uganda, Zambia, Zimbabwe
- **Middle East:** Bahrain, Gaza Strip, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen

Posted road speeds can change frequently and may contain inaccuracies. You can update the posted road speed of any road by left-clicking on a road from the live Map and selecting **Update posted road speed** from the popup window.

Any updates or changes to the posted road speed are shared with all customers. In this way, everyone benefits from each other's changes. On a periodic basis, the latest posted road speeds are sent to OSM, where they are made available to everyone on the Internet.

**Note**: Due to the possible inaccuracies caused by road construction or other hazards, we recommend that posted speed limits be used as part of a larger safety strategy.

# **Driver Congregation**

The **Driver Congregation** report (**Main Menu** > **Activity** > **Driver Congregation**) allows Administrators to see where and for how long their drivers congregate during the day. Select **Options** to customize settings such as the minimum number of congregating vehicles and the minimum overlap time to monitor driver congregation. Depending on how your fleet is organized, you can run the report for congregation by **Vehicle** or by **Driver** using a toggle switch.

The results display the drivers involved, their arrival and departure times, the duration of the congregation, and the location of the vehicles. This report can be downloaded as a PDF or Microsoft Excel file by selecting the **Report** button at the top of the page and selecting the desired file.

# Work Hours

The options available under the **Work Hours** tab of the **Activity** menu allow you to create, modify, and monitor the work hours applied to your drivers. Using these hours, you can monitor time spent driving, idling, and stopped, as well as track visits to customer, office, and home

zones.

### Time Card Report

The **Time Card Report** provides an easy way to view how your drivers are spending their time while at work. The report can be run by vehicle or by driver depending on your needs. When the report is run, it lists each day the driver or vehicle was active, with the total duration of their activity, their driving time, idling time, and a graphical representation showing what percentage of their time was spent at customer versus non-customer locations. Hovering over the sections in the chart will display labels for each section with the corresponding duration and percentage.

**Note**: Vehicles that do not visit customer locations will simply have their non-customer duration listed in place of the chart.

The report can be downloaded as a PDF or Microsoft Excel file by selecting the **Report** button at the top of the page.

Time Card Report				
11/09/20 00:00:00 3h 47m	Driving time 1h 57m	Idling time 58s	Non-Customer Duration 1h 49m 29s	
Vehicle 1 3h 47m	<ul> <li>▲ 11:22 ▼ 15:09</li> <li>Driving time 1h 57m</li> </ul>	Idling time 58s	Non-Customer Duration 1h 49m 29s	

# Work Hours

The **Work Hours** feature allows you to set hours of work for your drivers that will work in conjunction with your zones and rules to monitor your drivers' activity during the workday. This can prevent unnecessary loss of productivity by monitoring late arrivals, early departures, long lunch breaks, unauthorized time at home, and long stops during the workday.

The Fleet Management application has four default work hours:

- Early departure hours
- Late arrival hours
- Lunch hours
- Standard hours

You can edit the existing default hours by selecting them and using the **pen** icon to modify the time for each day.

To add your own set of work hours:

- 1. Select Activity > Work Hours... > Work Hours.
- 2. Select the **Add** button at the top of the page.
- 3. Create a name for your work hours, and select a **Holiday group**, if applicable.
- 4. Use the **Add work time** button to display options for selecting the date and time.
- 5. Select the **green check** icon to add your selections.

Once your work hours are set according to your needs, you can activate productivity rules on the <u>Rules</u> page to monitor driving habits.

#### Work Holidays

The **Work Holidays** feature allows you to set specific dates as holidays for your workers. This helps ensure the accuracy of your **Time Card** report after a holiday.

There are no default Work Holidays set in the Fleet Management application. To create a new Work Holiday:

- 1. Select Activity > Work Hours > Work Holidays.
- 2. Select **Add** from the top menu.
- 3. Enter a name and a date for your holiday.
- 4. Select a **Holiday Group ID** for your holiday. The default value for this field is 1.
- 5. Select **Save** to add your Work Holiday or **Cancel** to go back to the previous screen.

Your new holiday will now appear in a list format on the **Work Holidays** page. You can select a holiday at any time to modify or remove it.

**Note**: The application currently does not support recurring holidays. Each holiday must be entered separately into the system for each year in which it occurs.

#### Holiday Group ID

If your fleet operates in regions that observe different holidays, you can use the **Holiday group ID** feature to create sets of holidays. Simply select a number to represent each region, and then use that number to assign a holiday to that region using the **Holiday group ID** field. Once you have assigned a holiday group ID to a holiday, the corresponding ID number will appear in the dropdown menu of holiday group ID numbers on the **Work Hours** page.

**Note**: The **Holiday group ID** must be a number. If you enter letters or special characters into the field, you will be prompted to change them when you select **Save**.

### **IFTA Report**

The **IFTA Report** function allows you to quickly view details pertinent to IFTA reporting in one place. To run the report:

- 1. Navigate from the main menu to **Activity** > **IFTA Report**.
- 2. Select your desired date range from the listed options, or create your own.
- 3. Select the **Vehicles** you wish to include in the report from the dropdown menu, or use **Select all** to add all vehicles in your fleet.
- 4. Include or exclude archived data using the **Archived (historical) data** toggle.
- 5. Select Apply changes.

The report will list your selected vehicles and their associated drivers, as well as enter and exit times and odometer reading for each driver. It will also show the total distance driven in a particular vehicle for each driver.

You can download the report as either a PDF or a Microsoft Excel spreadsheet using the **Report** drop down menu to select the appropriate option.

#### Manually Recording Odometer Values

The IFTA report relies on the vehicle's odometer history, and in most cases, your Telematics Device Automatically records your odometer value.

For some vehicles, automatic recording of the odometer reading may not be available because the manufacturer does not provide it, or it is not supported. If unsupported, you can update the odometer in your account by manually entering your vehicle's current odometer reading.

To manually record your odometer value, navigate to **Main Menu** > **Vehicles & Assets** and select the desired asset from the list to open the **Asset Edit** page. Enter the new odometer value in the **Odometer** field and select **Save** from the top menu.

Manual Odometer Recommendations

The application retroactively corrects archived (historical) odometer readings based on the most

recently entered value (whether manually or automatically recorded). This most recent value is always assumed to be correct and overrides all previous entries or corrections.

Incorrectly entered information can result in inaccurate reports such as:

- Incorrect copying of or entering of an odometer value might produce negative archived (historical) trip values.
- When a Telematics Device firmware update introduces automated odometer tracking for a vehicle whose odometer values were manually, but incorrectly entered, it could produce a jump in the value.
- If a Telematics Device is moved from one vehicle to another, but the old vehicle was not marked as "archived (historical)", then odometer readings for multiple vehicles are combined. This could result in sudden jumps or past negative trips.

**Recommendations:** 

- Double-check your manual odometer readings and entries.
- When permanently transferring your Telematics Device to a new vehicle, set the previous vehicle to archived (historical) to preserve your location data, and then create a new vehicle.

# Log Data & Collisions

The **Log Data & Collisions** function allows you to quickly view all data logged by one or more Telematics Devices for a particular vehicle or vehicles. To view this data:

- 1. Select Activity > Log Data & Collisions.
- 2. Under the **Options** menu, select your desired date range and vehicle(s), and toggle archived data **On** or **Off**. You can select your vehicle from the dropdown menu or by typing the vehicle name into the search box.
- 3. Select **Apply changes** to display the data in your browser.

Options 🔺 🗐 🗐 Sort by: Vehic	le and date/time 👻	Report 🔻	
Date Period	Display Options		
Today	Include archived	Yes	No
Yesterday	(historical) data		
This week	Vehicles	Search vehicles	•
Last week	Selected: Test		Reset selection
This month	Selected. Test		
Last month			
Custom			
			Apply changes

You can organize your data in a variety of ways using the **Sort by** function in the top menu. The default sorting mechanism is by vehicle and date, which will display all records for a particular vehicle in sequential order according to date and time. You can also choose to sort by **Reason** or **Record type**.

Select the **map pin** icon at the far right of each record to open the Map page and display the location of the event that generated the record.

### **HOS Regulations**

The Fleet Management application supports most current HOS regulations. Depending on where your business operates, you can select the ruleset that applies to your drivers. The HOS submenu

allows you to view your drivers' logs, violations, and availability within the application.

For more information on viewing and using HOS reports, see <u>here</u>.

### Tachograph Add-In

Tachograph is an Add-in that helps you control and analyze the information generated by vehicles and drivers in your fleet. The Add-in allows users to download driving and rest period information in real-time, from anywhere at any time. Users can also analyze advanced information from tachograph file contents and infractions.

For more information on using the Tachograph Add-In, see <u>here</u>.

# Engine & Maintenance

# Understanding Your Vehicle

Authorized Resellers have access to a proprietary tool that is used to automatically discover the available engine information for your vehicle. This is done by providing your vehicle identification number (VIN) to your Reseller. The VIN is usually located on your dashboard.

In order to determine whether a vehicle is driving, stationary or turned off, the system uses patented technology to examine vehicle battery voltage, movement by use of accelerometer data, GPS location and available engine status information. This allows the system to be used in vehicles that do not include an engine bus, in new electric or hybrid vehicles, commercial vans, and large trucks.

# Types of Engine Data

Your Telematics Device is designed to collect and respond to status information in your vehicle. The port it is installed in is traditionally used for on-board diagnostics from the vehicle's manufacturer.

Your Telematics Device responds to changes in your vehicle in the following areas:

- Engine RPM
- Battery voltage
- Engine warning light on (MIL)
- Seat belt usage
- Odometer
- Engine hours (PTO)
- Emission faults
- Vehicle identification number (VIN)

Please be aware that due to differences in vehicle manufacturers, the actual engine information available in your vehicles may vary. We are constantly expanding the number of supported vehicles and features, and regularly distribute firmware updates as necessary.

**Note**: If when installing your Telematics Device you experience issues such as power loss, vehicle stalling, or engine lights turning on, you may have an incompatible vehicle. Please remove the Telematics Device and contact your authorized Reseller.

### **Current Vehicle Support**

Use the <u>Vehicle Type and Engine Data table</u> as a compatibility guide between vehicle types and certain application features. For more information, please contact your authorized Reseller.

# Engine and Device

### Asset Monitoring

See more information about your assets by navigating to **Engine & Maintenance** > **Engine and Device...** > **Asset Monitoring** (Feature Preview). Live sensor data displays in a table view that populate the nearby Map for side-by-side analysis. Open the **Columns** dropdown list to choose what information to display.

### Faults

The **Engine Faults** feature displays any faults detected by the telematics device in a given vehicle for the selected date range. You can choose to run the report by vehicle, which shows all engine faults for the selected vehicle(s), by diagnostic, which shows all vehicles that recorded that fault, or by a combination of the two.

To run the report:

- 1. Open the **Options** menu at the top of the Engine Faults page.
- 2. Select the date range you wish to view.
- 3. Include or exclude archived data using the **Include archived data** toggle.
- 4. Select your desired vehicle(s) and/or your desired fault(s).
- 5. Select the source and protocol.
- 6. Include or exclude dismissed faults using the **Include dismissed faults** toggle.
- 7. Click Apply changes.

The application displays a table that shows information about the faults for each vehicle. Selecting a fault from the list displays the date and time that the fault occurred. If the fault occurred more than once in the selected date range, the date and time for each instance will be shown. Open the **Columns** dropdown list to select which information to display on the table.

To download the report as a PDF or Microsoft Excel spreadsheet, select **Report** from the top menu and choose the appropriate option.

**Note**: The Engine Faults feature offers the option to dismiss selected faults in the top menu. Dismissing faults clears them from the application only; it does not clear them from the vehicle. You can view dismissed faults by enabling the feature in the **Options** menu at the top of the page.

#### Measurements

The **Engine Measurements** feature displays key graphical information about engine events. You can view engine measurements by selecting **Engine & Maintenance** > **Engine and Device...** > **Measurements**.

Use the **Options** dialog to set diagnostic, vehicle, and date filters for your data. The filtered measurements will be displayed as a list.

Engine Measurements Total items 4685				
Vehicle1 Personal Groups, Te	est			
Acceleration forward or braking	-2.82.8m/s²	₩ <b>₽</b> ~4; <b>^-4</b> ~4(µ4)[1 ++1)[1 ]]		
Acceleration side to side	-4.83.9m/s²	rthat work white the		
Acceleration up down	614.1m/s²	1441m HM444.4 UN-14 ~~~4 4~1		
Cranking voltage	7.915.5V			

Selecting a row from the list displays all instances of that measurement, including the date and time when they were recorded. Selecting the red sparkline graphic will take you to the **Engine Data Profile** graph for the selected measurement.

**Tip**: Selecting multiple diagnostic types from the **Options** dialog on the **Engine Data Profile** page will overlay all selected measurements on the graph.



### Diagnostics

The **Diagnostics** feature is a reference tool for diagnostic engine information. Selecting a diagnostic source from the **Choose source filter** dropdown menu will display all diagnostics associated with that source.

To learn more about a diagnostic, select it from the list to open the **Diagnostic View** page. This lists a short description of the diagnostic, as well as its source, code, type, controller type, and unit of measurement (if applicable.)

# Fuel and EV Energy Usage

The Fuel and EV Energy Usage report (formerly Fuel Usage report) supports conventional and Electric Vehicles (EVs), allowing fleets to compare both fuel and electric energy economy in one easy-to-read report.

The Fuel and EV Energy Usage Report provides a summary of fuel and/or electric energy

economy, travel distance, and monthly fuel and/or energy usage of selected vehicles. You can access the report by navigating to **Engine & Maintenance** > **Fuel and EV Energy Usage**.

The report groups fill-ups by asset, time period, or fuel/electric energy economy. Selecting an item from the list displays the fill-up or fill-ups associated with that item. For example, a report organized by asset will display all fill-ups associated with that asset in the selected date range.

Selecting **Fill-ups** from the top menu displays all fill-ups from the chosen date range, while selecting **EV Charging** (currently in Feature Preview) shows all charging sessions. From either page, selecting **Fuel and EV Energy Usage** from the top menu returns the user to the original report.

Fuel and EV Energy Usage ?		Total items 3
Mitsubishi Outlander PHEV		
Distance: 936 km Fuel used: 31.57 litre Energy used: 122.50 kWh	4.84 L-e/100 km	03/01/19 00:00:00 - 03/31/19 23:59:59
Nissen Leef BEV		
Distance: 789 km Energy used: 164.28 kWh	20.83 kWh/100km	03/01/19 00:00:00 – 03/31/19 23:59:59
Toyota RAVA		
Distance: 1188 km Fuel used: 107.30 litre	9.03 L/100 km	03/01/19 00:00:00 - 03/31/19 23:59:59

The report displays fuel usage and fuel economy for conventional vehicles, as well as electric energy used and electric energy economy for electric vehicles. It also displays % Electric Energy of Total, which can be used to evaluate whether a PHEV is running predominantly on gas.

**Note**: To include EV Charging, the former clearance name **View fill-ups and fuel transactions** is now **View fill-ups, EV charging, and fuel transactions**.

For more information about the Fuel and EV Energy Usage Report, refer to the <u>EV Reporting and</u> <u>Monitoring User Guide</u>.

#### Fill-Ups

A fill-up event occurs every time fuel is added to the asset. The Fill-Ups Report displays all fill-up events for a selected time period. To view this report, navigate to **Engine and Maintenance** > **Fuel and EV Energy Usage** and select the **Fill-Ups** button from the top menu. Select your date range and asset(s) from the **Options** tab and select **Apply changes** to view your results.

When sorted by asset or driver, the heading of every asset displays the average fuel economy, the total fuel added for the fill-up event, and the total cost of all fill-ups for the selected time period.



Click the graph button to view the fill-ups graph for the selected time period. Click the location button in each row to view the trip.

Selecting a row from the fill-ups report will show the details of that particular fill-up event. A matching fuel transaction will also be shown if available.

Vehicle Fill-Up	
æ	Vehicle 1 G9XXXXXXXXX
ł	Driver
<b>#</b>	11/01/20 12:18:31
A	70.00 L
•	40.90 L (41.6% - 100.0%)
•	37.29 L
A	134892 km
•	21-01 E.Coundre Heights No. (2010), 62 EERIS, 520

### Fill-Up Validation

Data from the telematics device is used to validate imported fuel transactions. A fill-up row that does not meet the validation criteria displays a yellow warning icon. Hovering the cursor over the icon will display the reason why the system flagged the fill-up.

The Fill-Up details page for a flagged fill-up event will show rows highlighted in yellow when the fuel transaction cannot be validated against telematics data.

### Fill-Ups Graph

The **Fill-Ups Graph** page can be used to validate a fill-up that has been flagged as suspicious. The graph can be accessed by selecting the **graph** icon at the far right of the **Fill-ups** page.



The image above illustrates a fuel transaction event where the fuel level of the car (red line) does not increase together with the blue line. Generally, such an instance indicates suspicious activity associated with that particular fill-up.

The blue line is influenced by three factors: the fuel transaction import, the fuel tank level as

reported by the vehicle, and the total fuel used as reported by the vehicle. Each dot on the blue line indicates a vehicle stop.

The red line is influenced only by the fuel tank level as reported by the vehicle. The accuracy of the red line will depend on the vehicle and manufacturer.

The two lines should follow a similar pattern under regular driving and refueling. However, because the blue line changes with imported transaction information, it is possible that the blue line may rise when the red line does not, indicating a scenario like the following:

- There was an instance of card sharing a driver forgot his fuel card and another driver let him use theirs.
- The fuel card is associated with the wrong vehicle.
- A driver has used the fuel card to fill a personal vehicle or a Jerry can.

To understand how fuel reporting works including features and limitations, refer to <u>Fuel Usage</u> <u>and Fill-Ups FAQs</u>.

# Importing Fuel Card Data into Your Database

Fuel card importing is vendor agnostic. Most fuel card providers will supply fuel transaction data in .csv or .xls file formats. Each row of the transaction file represents a separate fuel card transaction, with the columns indicating values like cost, volume, location, vehicle, etc. Fuel transactions can be imported using either of the methods below:

#### Using the Import Fuel Transactions Add-In

An Add-In has been developed to assist in importing fuel card data from .csv/.xls files. Two formats are supported: the WEX master file and a generic format.

- 1. Integrate the Fuel Transaction Import Add-In into your database.
- 2. Navigate to **Engine & Maintenance > Fuel Transaction Import** from the main menu.
- 3. Select the **Browse** button and choose a .csv/.xls file of the appropriate format. Be sure to convert .xlsx file to .xls files before importing.
- 4. Select the **Open File** button.
- 5. The Add-in will begin parsing the file. When completed, the first ten records will be previewed and the Import button will be enabled.
- 6. Some files may contain information for multiple fuel card accounts. In these cases you can select the account whose data you wish to import from the dropdown menu. Only the data rows with the selected account name will be imported into the database.
- 7. Select the **Import** button to import the selected data. The Add-in will notify you when the process has completed or if an error has occurred.

#### Using the API directly

The SDK documentation contains examples of adding, removing, setting, and searching for fuel transactions, along with information about the object structure. Potential use cases for using the API might be:

- 1. Developing a small application that monitors an FTP site for new files. Once new files appear, it processes and adds them to a database.
- 2. Fuel card system integration with the API.

# EV Charging

A charge event occurs every time an electric vehicle is charged. Similar to the Fill-Ups Report, the **EV Charging Report** displays all charge events, charge sessions, and multiple charge events that occur during a single stop, for a selected time period.

When sorted by vehicle or driver, the heading of every vehicle displays the amount of electric
energy added.



**Note**: For information on EV charging and firmware compatibility, refer to the <u>EV Reporting and</u> <u>Monitoring User Guide</u>.

# **Asset Inspection**

The **Asset Inspection** page lists all asset inspection reports that have been performed. To access the Asset Inspection in the Fleet Management Application, navigate to **Engine & Maintenance** > **Asset Inspection**. To learn more about Asset Inspections, including working with custom defect lists, see <u>here</u>.

## Reminders

The application supports proactive vehicle maintenance by allowing you to schedule reminders for routine oil changes, tire rotations, and other minor automotive services. Accurate GPS fleet tracking can also monitor the usage of your fleet and signal you when a vehicle is due for service. This helps prevent costly repairs when routine maintenance is neglected and reminds you when vehicles need attention to prevent future issues.

### Maintenance Reminders

You can view and create your reminder by navigating to Engine & Maintenance >

**Maintenance...** > **Reminders**. You can organize your rules by reminder name, maintenance type, repeat condition or number of vehicles added to the reminder using the **Sort by** filter at the top of the page. For better visibility, members of a parent group can publish reminders to members of a subgroup. Members of the subgroup can then edit the reminder to add assets or modify rule conditions. All subgroups under the company group can view the reminder, but only the subgroup with whom the reminder is shared, can modify it.

Maintenance Reminders	Showing 3 reminders Edit columns •			
Maintenance reminder	Maintenance type	Frequency	Repeats	
Lease Expiry	Lease expiry	01/09/20	No	
License Expiry	License expiry	04/22/20	No	
Oil Change	Oil change	Every 6 months or 2000 km	Yes	

To add a reminder rule:

1. Click **Add reminder** from the top menu on the **Maintenance Reminders** page.

- 2. Name your rule in the **Description** field.
- 3. Choose a **Reminder rule type** from the dropdown menu.
- 4. Specify if the reminder repeats by selecting **Yes** or **No**.
- 5. If you select **Yes**, determine when you will be reminded by setting a time interval (either once or every x days or months), or by selecting a threshold (either engine hours or mileage).
- 6. Use the **Add Assets** tab to search for and add assets to your rule.
- 7. Click **Save** to save your changes and return to the Maintenance Reminders page.

**Note**: You can choose to select more than one criterion (for example, every six months **and** every 10,000 km.) In this case, the reminder will be sent when the asset reaches one of the criteria.

Save Cancel		
Maintenance Remi	nder Edit show H	lelp
Conditions Add Vehicles		
Description:		
Reminder rule type:	Lease expiry	✓ Add new type
Reminder repeats:	Yes No	
Reminder frequency:		
Every:		Months Days
OR every:		km
OR every:		Engine hours

While the application has several built-in reminder rule categories, such as Oil Change and Lease Expiry, you can add additional categories to organize your own rules.

To add a new reminder rule type:

- 1. Begin by adding a reminder rule as normal.
- 2. Instead of selecting a reminder rule type from the dropdown list, select **Add new type**. The **Maintenance Types** page will open.
- 3. Click the **Add type** button on the top menu.
- 4. Create a name for your maintenance type and click **Add type**. The new type is now on the Maintenance Types list.
- 5. Click **Cancel** to return to the **Maintenance Reminder Edit** page.
- 6. Your new reminder rule type will appear in the dropdown list.

### **Upcoming Maintenance**

Recording that you have completed the maintenance service is optional. The reminders you have set will still continue even if you do not record the outcome, and the reminder schedule is not linked to your actual completed dates. If you wish to change your next reminder, you must change the reminder rule.

To record a completed maintenance:

- 1. Navigate to Engine & Maintenance > Maintenance... > Upcoming.
- 2. Click the **Complete** button beside the maintenance that is completed.
- 3. Enter the information about the maintenance or servicing done. Click **Save** to save your changes and return to the **Upcoming Maintenance** page.

# Maintenance Records

The **Maintenance Records** feature works with your maintenance reminders to provide a record of your asset's maintenance history. The feature is designed to be as flexible as possible to allow you to organize reports to best suit your fleet's needs.

The **Maintenance Records** page is found under **Engine & Maintenance > Maintenance... > Maintenance Records**. In order to customize your results for your needs, you can choose to search by **asset**, **maintenance type**, or **maintenance reminder name**. You can also choose to include or exclude archived assets.

You can add maintenance records individually or in bulk, importing existing records into the Fleet Management Application.

To add a single record:

- 1. Select Add maintenance record from the Add maintenance dropdown.
- 2. Enter the information about the maintenance or servicing done, including the cost if desired.
- 3. Click **Save** to save the maintenance record and return to the **Maintenance Records** page.

To add multiple records:

- 1. Select **Bulk import maintenance** from the **Add maintenance dropdown**.
- 2. Click **Download template** to organize your maintenance information.
- 3. Upload your file using the **Drop file here or click to browse** button. If you receive an error message, correct your file and try uploading again.
- 4. Click Import.

# Zones & Messages

### Zones

A zone is a virtual perimeter around a real-world area of interest. You can use zones to denote locations such as offices, customers, workplaces, airports, gas stations, entire states and provinces, or people's homes. When combined with exception reporting, zones become a critical component for analyzing the behavior of your fleet.

In the picture below, a vehicle trip is shown where the driver stopped inside a zone. When you hover your mouse over the stop, the name of the zone is displayed.



# Adding Zones

Zones can be added in the application several ways using the **Zones** and **Map** functions.

Adding zones using the Zones feature

The **Zones** feature makes it easy to add individual zones or to upload zones in bulk.

To add a zone via the Zones page:

- 1. Navigate to **Zones & Messages** > **Zones** from the main menu.
- 2. Select **Add** from the top of the page. The web page automatically opens the **Map** feature.
- 3. Select a starting point on the map to define the boundary of the zone.
- 4. Select additional points along the perimeter to create the boundary. A line connects the points showing the perimeter in the order you add them.
- 5. To finish, re-select the first point to close the zone.
- 6. The web page automatically redirects to the edit panel on the **Zones Edit** page, where you can name your new zone and select **Save**.

Once you have saved your zone, it will appear on the **Zones** page in your zones list. If you would like to add multiple zones at once, see <u>Importing Zones</u>.

#### Adding zones using the Map

To quickly add a square zone to a desired location:

- 1. Navigate to the **Map** page and click the area where you want to add a zone.
- 2. In the menu that opens, select **Add square zone here**.
- 3. The application automatically opens to the editing panel of the **Zones** page, where you can name and save your new zone.

**Tip**: If the option to add a zone does not appear in the menu when you select the map, use the **+** icon in the lower right-hand corner of the map to zoom in. Once you have enlarged the map, the option to add a zone will appear in the menu.

To create a custom zone using the map:

- 1. Navigate to the **Map** in the main menu.
- 2. Select **Add zone** from the top menu.
- 3. Select a starting point on the map to define the boundary of the zone.
- 4. Select additional points along the perimeter to create the boundary. A line connects the points showing the perimeter in the order you add them.
- 5. When finished, re-select the first point to close the zone.
- 6. The web page automatically redirects to the edit panel on the Zones page, where you can name your new zone and select **Save**.

Once you have saved your zone, the application will display it on the map.

### **Importing Zones**

You can use a spreadsheet application to prepare a list of zones to be imported to your account. This saves time when you want to create a large number of zones.

When addresses for your zones are available, use the following format to create a spreadsheet in Excel:

	A	В	с	D	E	F
1,	<sup>5</sup> Name	Address	Reference	Comments	ls zone circular?	Diameter
2	New zone without coordinates	Canada, Oakville	This is a reference for this zone	Comments	No	250

If you are creating zones in a remote area where street addresses are unavailable, you can use the following format which utilizes geographical coordinates instead:

	Α	В	с	D	E	F	G
1*	Name	Latitude	Longitude	Reference	Comments	ls the zone circular?	Diameter

2	New zone with coordinates	43.434438	-79.709544	This is a reference for this zone	Comments	Yes	250
---	---------------------------------	-----------	------------	---	----------	-----	-----

You will notice that in both examples, the reference column is an incremental number starting from 1 and is used to verify that all zones have been successfully created. Also, the diameter is based on the user's measurement system, i.e. 250 meters for metric or 250 yards for US.

When your spreadsheet is prepared, navigate to **Zones & Messages** > **Import Zones** and add your spreadsheet to the drag and drop field. The application will show a total count for the identified zones, as well as a count for valid and invalid zones.

Use the **Options** dropdown menu in the top left-hand corner of the page to customize the settings for your new zones, including their type, size, color, and visibility.

When you have finished making selections, select the blue **Import selected zones** icon on the right-hand side of the page to import your zones to the application.

# **Editing Zones**

Selecting a zone from the list on the **Zones** page will open the zone editing panel on the right-hand side of the page. The complete list of zones continues to display to the left.

Zones	lelp		3 Zones
Name	Zone types	Save Remove Cancel Show on map Help	
Customer		Zone Man	
Company group	Customer	Name: Zone 1	
Company group	Customer	Publish to groups:	
Company group	Customer	Company group	
		Comment:	
		Visible on map: Yes	No
		Types: Customer,	
		Indicate stops within Yes	No
		End date: Never Today Tomorrow	A week Other

The editing panel contains two tabs: **Zone** settings, which allow you to edit the zone name, the groups to which it belongs, and zone type; and **Map** settings, which control the appearance and shape of the zone on the map.

### Zone Settings

These are basic administrative settings, which include adding comments to the zone, setting an end date for temporary zones, indicating stops within the zone, and making the zone visible on the map.

Zone settings also allow Administrators to customize a particular zone to allow for specific reporting. Using a combination of groups and types, zones can become effective tools for advanced reporting on fleet behavior.

Zones are added to groups in the same way as other properties such as vehicles or users. The **Publish to groups** dropdown menu contains all pre-existing groups, and can be used to separate zones by region, function, or other classification depending on your organization.

Zones can also be assigned a **type**. These labels, such as Customer, Office, or Home, support very specific reports. For example, if you create zones around customer locations, you can report and filter by the customer zone type. This allows you to easily see when drivers arrive and depart from customer locations.

Zone types are assigned using the **Types** dropdown menu on the zone edit panel. To add or edit an existing type, use the **Types** button in the top menu of the Zones page. This opens the **Zone Types** page, where you can select a type from the list to edit, or select **Add** in the top menu to create a new type.

#### Map Settings

Selecting this tab in the zone editing panel will display a view of the zone on the map. The top menu bar displays the color options for zones, and a sliding bar to adjust the color transparency.

To change the shape of a zone, select the **Change zone shape** button in the top menu. You can adjust the shape of the zone by moving the existing points, selecting anywhere along the zone boundary to add a new point, or by dragging a point off the map to remove it.

You can preview your changes using the **Preview** button, or remove your changes by selecting **Reset changes**. When you are finished, select **Save** to return to the zone list.

**Note**: Changing zone properties will only affect future data. To learn more about reprocessing data from the past, see <u>here</u>.

### **Removing Zones**

Zones can be removed from the database by selecting a zone, either in the **Zones** list or on the **Map**, and then selecting **Remove**. Once the zone is removed, it will no longer appear on the map. Any reports that previously displayed the zone name will instead show the zone address, if available.

Making changes to or removing multiple zones at a time is made easy by using the checkbox in the top-right corner of the **Zones** page to select multiple zones.

500 Z	ones	Select individual 🔺	Columns 🔻
	Selec	t visible	-
	Selec	t individual	
	Selec	et none	

Once your zones are selected, select **Remove selected zones** or **Edit selected zones** from the top menu to affect all the selected zones.

### **Dispatching Zones to Vehicles**

The application offers an intuitive way to dispatch members of your mobile team to and from job sites in real-time. You can easily dispatch new jobs, pickup and drop off locations, zones or entire routes to your Garmin equipped vehicles.

**Note**: A Garmin device can be added to a version 6 or version 4v3 Device. Not every Garmin model works with all the features the Telematics Device offers. Contact your authorized Reseller

to purchase the necessary hardware.

To send a zone you have created to a vehicle:

- 1. Locate the zone by either using the map or using the search box.
- 2. Once the zone displays, select it.
- 3. Select **Dispatch vehicle here**, from the popup zone options.

When creating a dispatch request, you can select one or more vehicles to receive the request. Those drivers can optionally receive text messages you specify which include additional instructions about the job.

# **Customer Visits**

The **Customer Visits** report allows you to quickly see where your vehicles are spending their time. The report can be run by driver or by vehicle depending on your needs.

To access the Customer Visits report, navigate to **Zones & Messages** > **Customer Visits**. Select your desired vehicle(s) from the list in the top left corner, or use the **Select all** option to run the report for every vehicle in your database.

The default report includes all zones in your database, but you can use the **Zone Types** field in the **Options** menu to select a specific type of zone (for example, Customer). If you would like to return to viewing all zone types, use the **Select all** option.

When you have selected the appropriate filters, select **Apply changes** to populate your data. Results are displayed with the vehicle name in the top left corner of each list item. Each entry lists the name of the zone, the time of arrival, the duration of the stop, and the time of departure.

Selecting the **Location** icon will open the **Trips History** page to show the location of the vehicle during that particular stop and the trip details. The **Sort by:** dropdown menu at the top of the page allows you to organize your results in useful ways, such as by duration or by zone.

You can also select the **Summary** button to view the total number of stops in each zone that your vehicle(s) made. Individual entries for multiple stops in a single zone will condense into one entry detailing the first arrival time, the last departure time, the total duration of stops, and a count of how many stops were made inside the zone. Selecting the **Details** button at the top of the page will return you to the Details page.

Search vehicles	Summary JF S	ort by: Name	▼ Report ▼
Customer Visits	Shc	wing 2 vi	sits Columns ▼
Zone Name	Time of Arrival	Visit Du	Time of Departur
Vehicle 1			
Sample Zone A	11/05/20 14:2	16m 2s	11/05/20 14:3
<b>O</b> Work	11/09/20 11:5	5m 38s	11/09/20 12:0

### Routes

The Routes feature in the application provides an effective way to reduce fuel consumption, mileage, and CO2 emissions by optimizing the routes your drivers use. You can use it to create route plans for your fleet, compare planned and actual routes, and identify new opportunities for

operational efficiency.

# Using Routes

There are two dimensions to the **Routes** feature of the Fleet Management application: **Routes**, which are simple sets of waypoints, and **Route Plans**, which are routes with certain expectations such as arrival times and stop durations. Depending on your needs, you may use one or both of these functions to help manage your fleet.

Navigate to **Map** > **Routes...** > **Routes** to view a list of your current routes. Selecting the **map pin** icon to the right of each route name opens the **Map** feature.

### Adding Routes

Routes are created by connecting a sequence of zones together to form a path. These sequences are completely customizable, and waypoints can be added in any order. Furthermore, routes can start and end at the same location, or be a sequence of linear stops.

To create a route:

- 1. Navigate to **Map** > **Routes...** > **Routes** from the main menu.
- 2. Select the **Add route** button from the top menu to create a new route.
- 3. Assign a departure point for the route by selecting a location on the map, and selecting **Add Waypoint**. Select any additional locations the driver must visit.
- 4. Select **Save route** located in the top menu.

**Note**: Selecting a waypoint to add to a route will automatically create a zone for that area in your database if a zone does not already exist in that location.

### **Creating Route Plans**

A **Route plan** takes an existing route and applies it to a specific vehicle at a specific time. This allows you to specify criteria such as arrival time, stop duration, and departure time for each location on your route, and to select a vehicle to drive the route at that time. Once the route has been completed, you can compare the actual route against the route plan.

**Note:** Only one route plan can be assigned to a vehicle in a single day.

You can view your current route plans by navigating to **Map** > **Routes...** > **Routes** and selecting **Route plans** in the **Options** menu at the top of the page. Because route plans are governed by applied to specific times and vehicles, your results are dependent on the vehicle and date you select in the options menu. The application defaults to the current day, but will not display any results if a vehicle is not selected.

Before creating your route plan, ensure that you have created the appropriate route using the directions found in <u>Adding Routes</u>.

To create your route plan:

- 1. Select your desired route from the list found at **Map** > **Routes...** > **Routes**.
- 2. Select **Create plan** from the top menu.
- 3. Use the dropdown menu to select a **vehicle** for the route.
- 4. Select a **start date** on which the vehicle will drive the route.
- 5. Select a time at which the vehicle will arrive at the first location on the route. If the vehicle's origin point is a waypoint on the route, ensure that this location is ordered first and select the Vehicle parked here at route start option to make this location the starting point when optimizing your route.
- 6. The application automatically populates the first three fields for each location thereafter: the arrival time, the distance from the previous location, and the time spent driving between each location. You can specify the length of the stop at that location by entering a time into the

fourth field.

- 7. Repeat steps 5 and 6 for every subsequent stop on the route.
- 8. Click **Save** to save your planned route. The route now displays on the Routes page if **Route plans** is toggled on.

### **Editing Routes**

Routes are edited in the **Route Edit** page. To edit a route:

- 1. Select **Map** > **Routes...** > **Routes** from the main menu.
- 2. Select the route you wish to edit from the provided list. Here you can edit the route name, add comments and rearrange the order of stops in the route.

\*

- 3. To add or edit the stops on a route, select **Show on map** from the top menu to open the **Map** view.
- Select the route to open the menu options and select Edit route from the available options. You will now be able to modify the route by dragging existing points or by selecting locations on the map to add new points.
- 5. When finished making changes, select **Save route** from the top menu.
- 6. Update the route name, if desired, and select **Save** from the top menu. Your new changes will now display on the Map.

### **Removing Routes**

Routes can be removed from the database in two ways. To remove a route from the **Routes** feature:

- 1. Navigate to **Map** > **Routes...** > **Routes**.
- 2. Select the route you wish to remove from the provided list to open the **Route Edit** page.
- 3. Select **Remove** from the top menu.
- 4. When prompted, select **Remove** in the confirmation dialogue box.

**Note**: Routes removed in this way cannot be recovered after they have been removed.

To remove a route using the **Map** feature:

- 1. Open the **Route Edit** page as above.
- 2. Select **Show on map** in the top menu to display the route on the map.
- 3. Select the route to display the route menu.
- 4. Select remove route.

**Note**: Routes removed in this way can be retrieved via the **Undo changes** button in the route removal confirmation banner.

\*

### Importing Routes

This process requires the use of the Software Development Kit (SDK). There is an example file in the SDK to assist you in the process of creating a route import utility. The example file facilitates the rudimentary adding of route plans, whereby the details of the route name, stop locations, the estimated time to drive to each location and the estimated time to be spent at each stop are added via a simple user interface then imported into your database.

**Note**: Contact your authorized Reseller for more information on the SDK samples and for assistance with this process.

### Dispatching Routes to Vehicles

You can send your routes directly to vehicles to dispatch a sequence of destinations the driver should reach. To send a route to a vehicle:

1. Navigate to **Map** > **Routes...** > **Routes** from the main menu.

- 2. Select your desired route from the provided list.
- 3. Send the route to the vehicle by clicking the **Send to vehicle** button from the top menu.
- 4. Select the recipient for the route and select **Compose message**. You can choose your recipient from your available assets, drivers, or groups.
- 5. Compose your message to accompany your route. You can add a message for each stop on your route.
- 6. Select **Remove existing stops** if you wish to remove the existing list of stops from your recipient's device.
- 7. Click **Send** to send your message.

\*

When you have sent your message, you will be given the option to select a canned reply to your recipient by selecting from the list or creating a new canned reply. You can also send an additional message or link to your recipient if desired.

If the recipient replies to your message, the reply will display in the same window as in a chat function.

# Planned vs. Actual Route Report

You can compare your route plans and your vehicles' real-world activity using the **Planned vs. Actual Route Report** feature. This tool makes it easy to see the deviation between routes and trips and to identify potential areas for improvement within your fleet.

To access the report, navigate to **Map** > **Routes...** > **Planned vs Actual Route Report**. Select an asset from the dropdown menu, or **Select all** to view all assets in your database. The report automatically defaults to the current day; to view archived data, select the appropriate date range in the **Options** menu.

The report displays your planned routes and trips by day and by asset. Stops inside of zones are listed in blue, and stops outside of zones are listed in red. This makes it easy to see where your assets are spending the majority of their time. Because zones are automatically generated around planned stops, any stop outside a zone will be labelled as an **Unexpected stop**.

The report displays the **planned** arrival time, stop duration, driving distance, and driving duration for each stop in **grey** text to the right of the stop name. The **actual** values for each of these criteria are displayed in **blue** text above the planned values.

\*

Select the **Information icon** at the far right of each entry to show the stop information in list format, including the zone name, the actual and planned arrival times, the actual and planned stop duration, the actual driving distance and duration, and the planned driving distance and duration. If the stop was unplanned, it will simply show the actual arrival time and stop duration.

Select the **Map pin icon** at the top of the trip summary to open the **Map** view. The application automatically displays a comparison of the planned route alongside the actual route the vehicle took.

Planned routes are plotted in a solid, black line, with a green triangle to mark the route start, numbered red circles to mark stops, and a red square to mark the route finish. Actual routes are plotted like normal trips, and will display any exception rule violations that occurred during the trip. If you would like to view the trip without exceptions, select **Remove all** from the map legend to remove them from the map.



The Planned vs. Actual Route Report can be downloaded as a PDF or Microsoft Excel file by selecting **Report** from the top menu and selecting your desired file type.

### Route Summary

The **Route Summary** report is used to find assets that are driving on or near routes based on data from the Telematics Device. This feature is useful for using historical data to determine whether multiple vehicles are driving on the same routes, or if routes could be modified for optimization.

To run the Route Summary report, navigate to **Map** > **Routes...** > **Route Summary**. You can choose to view the report either by **Asset** (to determine if particular vehicles are driving near routes) or by **Route** (to determine if any assets are driving near a particular route.) Select a date range for your data and select **Apply changes** to view your results.

If you have run the report by Asset, each asset you selected will show as its own heading, with the names of routes it closely matches listed below. If the asset is not closely matched with a route, it will not show in the list. Likewise, if you have run the report by Route, each route you selected will show at its own heading, with the name of assets that drive similar patterns listed below. If the route does not match with an asset, it will not show in the list.

\*

You can download the Route Summary report as a PDF or Microsoft Excel file by selecting **Report** in the top menu and selecting your preferred file format.

# **Unmatched** Route

The **Unmatched Route** report works in conjunction with your planned routes to track how much driving each asset does that is not part of a planned route. In the case of fleets or groups of assets that drive predetermined routes, this can be very useful in highlighting anomalies and unplanned stops.

To run the report, navigate to **Map** > **Routes** > **Unmatched Route** and select your date range and desired asset(s).

Select **Apply Changes** to populate your results. Each selected asset will have one entry per day in the date range, with the total distance driven off route shown on the far right side of the page, regardless of how many off-route trips that vehicle took during that day. If the asset did not drive off route for any given day in the date range, the date will still be listed but the distance driven

will be zero.

#### \*

# Messages

The Telematics Device works with Garmin in-vehicle navigation devices to allow seamless two-way text message communication between the web and the driver. Messages sent to drivers display as alerts and can be answered using easy, single tap responses, or text messages to accept new jobs and tasks.

# Rules & Groups

# Rules

Understanding when and where issues arise within the fleet is made simple with the use of exception rules.

Exception rules are conditions that outline the ideal behavior of a fleet. When a vehicle event breaks a rule, an exception is recorded within the system. Exceptions can be used to trigger notifications to be sent out to specific users, such as the rule-breaker, their manager, and other relevant parties. Fleet managers can then review their exceptions history through reports to understand the trending behaviors of their fleet.

The application offers a robust suite of built-in exception rules organized by categories such as, safety, and productivity. In addition to these, you can create custom rules that combine various different conditions to suit your needs.

Exception rules can be managed via the **Rules** page. Each default rule is listed with a brief description and, where applicable, customization options. Use the **On/Off** toggle to enable or disable built-in rules. The application prompts the user to confirm when rules are enabled or disabled to prevent accidental changes to exception reporting.

You can make direct changes to built-in rules through the interface, such as adjusting values like speed and g-force where applicable. Selecting the envelope button to the right of each rule opens a list of notification recipients, allowing you to manage who is notified when an exception rule is broken.

Safety Exceptions	These rules enable fleet-wide safety and driver improvement through live notifications of dangerous in-vehicle behaviors. Enabling these rules allows early detection and response to driver activity, which greatly increases the road safety of your drivers and those around them. Listed <u>here</u> are all the built-in safety-related exceptions that the application offers.
Productivity Exceptions	These rules will notify you of exceptions such as late arrivals, early departures, idling, unauthorized home or customer stops, excessive office time, long lunches, and even long stops during work hours. Listed <u>here</u> are all the built-in productivity-related exceptions that the application offers.
Fleet Optimization	These rules assist with managing driver behaviors such as speeding and idling, which help proactively keep your fuel costs down. They also detect engine issues before they become costly

# Built-In Exception Rule Types

	problems. These exceptions have the potential to realize significant cost-saving benefits. Listed <u>here</u> are all the built-in fleet-related exceptions that the application offers.
Compliance	These rules help track compliance issues within your fleet, including missing vehicle inspections and HOS exemptions. Listed <u>here</u> are all the built-in compliance-related exceptions that the application offers.
Sustainability	These rules are designed to help manage your carbon footprint and support electric vehicles (EVs). Receive notifications when EVs are done charging or are low on charge, and track idling across your fleet to reduce waste. Listed <u>here</u> are all the built-in sustainability rules that the application offers.
System Exceptions	A system notice rule tracks critical errors, originating either in the application software, or from each individual Telematics Device. While the system notice rule is always active, only those Administrators who opt in to this rule's notifications are alerted when exceptions occur. As with any rule, you may select the type of notification you desire. The system notice rule can be found here. Select the envelope icon to customize your notifications.
Material Management	These rules focus on vehicles that spread solid, pre-wet, or liquid material, and must be set to On in order to run the Material Management reports. Listed <u>here</u> are all the built-in compliance-related exceptions that the application offers.

# Adding Exception Rules

- 1. Navigate to **Rules & Groups** > **Rules** from the main menu.
- 2. Select **Add** from the top menu on the **Rules** page.
- 3. Under the **Name** tab, name the rule and customize the rule's color and visibility.
- 4. Select the **Publish to groups** dropdown and select the groups to which the rule will apply.
- 5. Under the **Conditions** tab, set conditions for when the exception rule is triggered using the available headings and their corresponding options.
- 6. Under the **Notifications** tab, add exceptions rule notifications including emails, alerts, or driver feedback.
- 7. Select **Save** to add your exception rule.

### Publishing Exception Rules

Publishing a rule to the Company group will make it visible to all users. When using the **Publish to groups** menu, the user can select a group other than the Company group. In this case, the rule will be available to view and edit for all users of the selected group and the parent groups, but will only be viewable to users belonging to the subgroups. In either case, the user will need sufficient security clearances to be able to edit or view the rule.

Additionally, the groups selected with the **Publish to groups** menu determine the vehicles and drivers to which the rule is applied. If set for the Company group, the rule will apply to all vehicles and drivers, whereas selecting a specific group will apply the rule to only the vehicles and drivers in that group and its subgroups.

Note: Making a user the driver of a vehicle to which a rule applies does not grant the user any

additional editing or viewing permissions to that rule.

# **Removing Exception Rules**

Select the rule you wish to remove from the exception rules list. Select the **Remove** button at the top of the **Exception Rule Edit** page. A dialog will prompt you to verify your decision. If you are certain you wish to remove the exception rule, select **Delete**.

**Note**: Built-in exception rules cannot be removed.

# **Exception Rule Notifications**

When exception rules are broken, you have the choice to send out automatic notifications to the relevant parties. A notification can be sent out in the following ways:

- An email to one or more recipients.
- An alert that is displayed inside the application to a specified user.
- An audible in-vehicle alert from the Telematics Device.
- Additional alerts such as SMS as made possible by third-party systems.

**Note**: There may be a minor delay between when data is sent from the vehicle to when the server sends a notification depending on the type of notification and exception being handled.

## Notification Templates

Before you can add notifications to your exception rules, you must configure notification templates. Notification templates define the information contained within notifications and use variable tokens and static text to allow the delivery of customized notifications to recipients. There are three types of notification templates: email templates, web templates, and text templates.

Some use cases of customized notifications are:

- Sending compact notifications to mobile devices to conserve data usage;
- Including a contact phone number in emergency situations; and
- Offering a web link to a map containing directions to a service station when an engine failure is detected.

The **Notification Templates** page can be reached by navigating to **Rules & Groups** > **Rules** and then selecting the **Notification templates** button at the top of the page.

The **Notifications templates** page displays a list of all currently available templates. You can edit existing templates by selecting them from the list, or create new templates using the three **Add** buttons at the top of the page.

### Add email template

Email templates are used to customize the emails sent when an exception rule is broken. An exception report can also be attached to the template to provide an in-depth look at the rule infraction. The application provides a generic email template by default.

Selecting **Add email template** on the Notification Template page allows you to create a custom template name, subject, and body, specify the email attachments, and define the infraction information.

#### Add web template

Selecting **Add web template** on the Notification Template page allows you to configure exception rule infraction information to be sent out as a GET or POST request to a web server.

### Add text template

Text templates are used to customize the information included in a popup alert within the

application. Selecting **Add text template** on the Notification Template page allows you to name your template, create the appropriate text for your alert, and define the infraction information.

**Note**: For convenience's sake, notification templates can also be added directly through the **Rules** page. Simply select the **envelope** icon to the right of the appropriate rule, select the type of notification you would like to set up, and select **Add new** from the template dropdown menu.

### **Removing Notification Templates**

Because notifications encapsulate notification templates, make sure to delete notification templates with care. Deleting a notification template will delete all notifications using that template — potentially leaving users without notifications.

### Adding Notifications

Once you have set up the appropriate notification templates, you can add notifications to your exception rules. To add notifications, navigate to **Rules & Groups** > **Rules** and select the rule to which you want to add a notification from the list. Select the **Notifications** tab of the **Exception Rule Edit** page.

You can choose from a variety of notification types. Select the most appropriate type from the list below.

### **Email Notifications**

To add an email notification, select **Add email**. Choose the appropriate template from the dropdown **Template** menu, or select **Add new template** to create a new email template. Add your intended recipients to the **Email** feed. When you are satisfied, select **Add** to prepare the notification.

#### Alert Notifications

The application offers three choices for alerts. A **Popup** notification displays a yellow, low-priority alert at the top of the screen. An **Urgent Popup** displays a red alert for each instance of the exception. **Log only** alerts log a notification in **My Notifications**.

Choose the type of alert you wish to send, and then select a template from the **Template** dropdown menu. Then select the recipient from the dropdown list below. When you are satisfied with your selections, select **Add** to prepare the notification.

### Driver Feedback

Driver feedback notifications use the telematics device to alert the driver to infractions, either by issuing a series of beeps or communicating through a third-party device.

To add a driver feedback notification:

- 1. Select Add driver feedback button.
- 2. Toggle **Allow late notifications** on or off depending on your needs. Allowing late notifications is useful when you would like notifications to be sent to the vehicle even if the exception has already passed. This is best used in situations where connectivity is poor.
- 3. Select one of the driver feedback options from the dropdown menu.
- 4. The driver feedback option is automatically added to the exception rule upon selection and appears below the notification recipients field.

**Note**: Adding driver feedback does not require a direct recipient. If this notification type is assigned to a device, the device produces driver feedback.

More Options

The **More...** button to the right of the notification options reveals additional notification choices: **Web request**, **Assign to group**, **Email to group**, **Distribution list**, and **Assign as Personal/Business**. Using these options, you can further customize the conditions that need to be met for a notification to be sent out. You can combine multiple conditions together to specify exact business cases such as dangerous driving detected from engine measurements; seat belt use when in motion; and arrivals and departures from zones outside normal working hours.

### Notification Types

Web request	Sends a GET or a POST request to a server as defined in a web template.
Assign to group	Sets all infracted vehicles as part of a specified group.
Email to group	Notifies all members of the selected group about the rule infraction.
Distribution list	Notifies all members of a distribution list about the rule infraction. For more information about distribution lists, see here.
Assign as Personal/Business	Prompts drivers to change their vehicle(s) status.

#### **Removing Notifications**

Notification can be removed from an exception rule by selecting the small × beside the notification under the **Notifications** tab on the **Rule Edit** page. Select **Save** to finalize your changes.

### **Reprocessing Data**

By default, the application generates exceptions starting from the time the rule is created. It does not apply the rule to vehicle activity that occurred in the past, i.e., retroactively. If you wish to apply the rule to previously generated data, you can use the reprocessing feature. The reprocessing feature allows users to specify a new start date, then recalculates all exceptions from that date onward. Trips are reprocessed as of version 1802.

To reprocess your data:

- 1. Navigate to **Rules & Groups** > **Rules** from the main menu.
- 2. Click the **Reprocess data** button located in the top menu.
- 3. From the popup window, select a **Start date**, one or more vehicles, one or more rules, then click **Apply changes**.

**Note:** The maximum range for reprocessing data is 13 months from the current date. If an older date is selected in the calendar, the application will automatically move it to the last date in the 13-month window.

### **Distribution List**

A distribution list is a reusable collection of multiple recipients and their corresponding notification types. A distribution list is useful when configuring the same group of users to receive notifications of different exceptions.

To create a distribution list, navigate to **Rules & Groups** > **Rules** and select **Distribution lists** from the top menu. Select **Add** from the top menu on the Distributions Lists page and create a name for your list using the **Name** field. You can then configure your distribution list using the following options:

Add email	Select your email template, or select <b>Add new template</b> to create a new template. Add your intended recipients in the <b>Email</b> field.
Add alert	Choose the type of alert you wish to send (Popup, urgent popup

	or log only) and then select a template for the alert and your intended recipients.
Add driver feedback	Use the toggle to turn late notifications to vehicles on or off. A late notification will send feedback to the driver even if the exception that triggered it has already passed. Then select the type of feedback the notification will trigger.
Web request	Select <b>More</b> > <b>Web request</b> . This allows you to make an HTTP GET or POST web request.
Assign to group	Select <b>More</b> > <b>Assign to group</b> . This allows you to assign a vehicle to a specific group.
Email to group	Select <b>More</b> > <b>Email to Group</b> . This allows you to email users in a selected group (such as an auxiliary group).
Assign as Personal/Business	Select <b>More</b> > <b>Assign as Personal/Business</b> . This allows you to put a vehicle into Personal Mode, where no GPS tracking is used, or into Business Mode, where GPS tracking is used.

### Auxiliary Rules

Auxiliary rules are exception rules that help you manage sensors and external input devices connected to the Telematics Device. As with exception rules, auxiliary rules are handled in real-time.

**Note**: Auxiliary Rules were formerly known as Auxiliary Groups.

#### Adding an Auxiliary Rule

Auxiliaries are best managed from their own Group branch under the **Company group**. To create a new group, go to **Rules & Groups** > **Groups** and do the following:

- 1. Add a new group called **Auxiliaries**.
- 2. Add a subgroup under **Auxiliaries** named, for example, "Salt Truck".

Once you have created the appropriate group, you can begin adding auxiliary rules to it. To create an auxiliary rule:

- 1. Go to **Rules & Groups** > **Rules** and select **Add** to begin adding a new rule.
- 2. Under the **Name** tab, give the rule a name, for example, "Salter".
- 3. Select the appropriate auxiliary rule subgroup as the group this rule is published to.
- 4. Select the **Conditions** tab and select the connected auxiliary port from the **More...** menu.
- 5. Select **True** for the value from the opened Condition Value Selection then select **Add** to associate the new rule with this auxiliary input.
- 6. Add any additional conditions you might require such as the ignition being on, a minimum duration, or a vehicle speed and save the rule.

**Note**: Your new rule applies to future data. If you would like to apply the auxiliary rule to archived (historical) information, you must first reprocess your archived (historical) data using the **Reprocess data** button on the **Rules** page.

#### Applying Auxiliary Rules to Vehicles

- 1. Navigate to **Vehicles** from the main menu and select one or more vehicles to which you wish to apply the auxiliary rule.
- 2. Select the **Groups** tab and choose the appropriate auxiliary rule subgroup from the **Groups** dropdown and save.

Because Auxiliary Rules are applied on a per group basis, a user will need access to that specific auxiliary group to be able to work with it. Note that giving a user access to an auxiliary group in their "Data Scope" may result in them having access to vehicles they are not intended to see. For this reason you can give a user access to the auxiliary group within their reporting scope. This will allow the user to view the exceptions on the map, as well as to create reports from these exceptions.

If the user in question does not have the Entire Organization data scope, then select the auxiliary group you would like the user to be able to make reports of under the **Additionally allow reporting by these groups** label on the **User Edit** page (**Administration** > **Users**) for that user.

# Exceptions

The **Exceptions** page provides a summary of all exception rules that have been broken within a selected time period. It can be found under the **Rules & Groups** option in the main menu.



The **Options** button opens up a set of parameters used to refine the search criteria for exceptions. Use the **View by** toggle to view exceptions by vehicle or by driver, and select the desired vehicle(s) from the **Vehicle** dropdown menu. You can also choose to filter the report by specific exception rules using the **Rules** dropdown menu.

You can combine these filters in a variety of ways to pinpoint issues within your fleet and highlight risky driving behavior.

On the **Exceptions** page, click an event to view the assets that have broken that exception rule. Click the arrow beside the asset's name and then the event link to view details such as location, duration, and driver contact information on the **Exception overview** tab (Feature Preview). For additional context, enter a comment in the **Comment** box and add links or attachments by clicking the icons under the box (Feature Preview).



Click **View engine profile** to open the **Engine Data Profile** page for this specific vehicle and event. Click **View trip** to open the **Trips History** page and see the trip where the event happened.

# Sort Order

By default, the list is sorted in descending order based on the duration of the exception. Alternative sorting options include the distance for which the exception occurred, the amount of times the exception occurred, or the number of drivers/vehicles that violated the exception rule.

# Reporting and Visualization

The **Report** button opens up a selection of reporting options available for the exceptions data set. Select the report to download a Microsoft Excel copy, or select the icon to the right of the report name to display a preview of the report in the web browser or download a PDF copy.

Additionally, the following buttons help deliver insight into the time and location of each exception:

- The **graph** icon links to a polar area chart that displays Exceptions for a given week.
- The **map pin** icon links to the Trip History page for the trip that generated the exception.

### Interactive List View

The interactive list view allows you to open up additional information about an exception rule by selecting its row. A new page subdivides the infractions by vehicles — or drivers, if selected in the options.

In this manner, you can drill down your reporting to view specifics as related to particular drivers or vehicles for relevant time periods.

Exceptions Show Help				
Hard A	ccelerati	ion		
Vehicle 1		1s 0 km	9 💽	
11/16/20:				
10:27:01	0s	0 km little Management i kinger ins i 10-156. Dersete	0.3G > 0.29G	
10:31:00	0s	0 km arrest and a finite in the second of the line in the Canada	0.35G > 0.29G	
10:38:39	0s	0 km PECT The of DUART THE & Remained OFFICE DECIDENCE	0.3G > 0.29G	
10:41:33	0s	0 km	0.32G > 0.29G	
10:42:19	0s	0 km - Franklin I. Handler, 1991, 1990, 2001, 2000	0.29G > 0.29G	
11:17:33	0s	0 km 3 to 1 month of the life in the life	0.31G > 0.29G	
11:33:30	0s	0 km Sample Zone B	0.32G > 0.29G	
11:34:40	0s	0 km 420 Kayar Panalar Na Ramban Off JCC 181, Canada	0.29G > 0.29G	
12:03:59	0s	0 km hitself Picket I sysperate All VLL2, Harmiton, CA LD4, 1,15, Canada	0.29G > 0.29G	

**Note**: Speeding exceptions rely on the availability and accuracy of speed limit data in your area. Speeding exceptions logged in areas with estimated speed limits include an indication that the exception was based on an estimate.

# Groups

Groups are used to organize your assets, users, and zones.

To help organize your fleet, you can create groups to separate vehicles into different areas. If multiple user accounts use the application, users can be given access to all groups or only selected groups. Grouping can be used for vehicle types, regions, managers, or exceptions — the configuration is open to your organization.

You can organize your assets, exceptions, zones and users into groups to match the layout of your own organization. For instance, if your organization has East and West divisions, then you

can easily separate your account in this way. This allows important information for each division to be presented only to those responsible for managing them. Members of a group can choose to share assets with non-members, without having to provide full membership to the group by setting the Visible to all users option to On.

When you have created groups, you can use the **Filter** in the top header of the application to filter data by particular groups for the application as a whole. For more information on the filter, see <u>here</u>.

# Managing Groups

Navigate to **Rules & Groups** from the main menu then select **Groups** from the submenu. Groups are managed using a graphical interface that shows the hierarchical organization of your organization including the base set of groups provided by the application.

- **Locations**: Used to separate assets into the areas they service. For example, East and West.
- **Reports**: Used to denote which users receive the available emailed reports.
- **Vocation**: Used to organize assets for reporting sales, service, delivery, etc.
- **Driver activity:** Used to classify driver activity as Business or Personal. Business and Personal subgroups cannot be modified or deleted.

Groups can be placed inside other groups. This allows your account to be set up to match your organization's hierarchy.



Once a group has been created, you can change its location in your organization's hierarchy by selecting the desired group and then selecting the **Move** button in the top menu. Click the new parent group and confirm your selection using the green **Move to selected** button at the top of the page.

You can also change the name or description of your group using the **Edit** button in the top menu, or delete it using the **Remove** button.

# Administration

# Report Setup

Understanding your fleet's behavior is made easy with the versatility of the application's reporting features. You can use standard reports to monitor activities such as deliveries per driver, average fuel consumption, and drivers who speed, or to identify those drivers who frequently arrive late and depart early. If the range of standard reports does not meet your needs, you can create limitless custom reports in Microsoft Excel. Downloading your reports as PDF or Microsoft Excel files gives you further ability to examine and work with your data.

Schedule your reports to be emailed to you daily, weekly, monthly, or on demand. With proactive management, you can create custom rules for your drivers and receive instant updates through email and more.

# **Report Views**

Navigate to **Administration** on the main menu. Select **Report Setup...** then **Report Views** from the submenu. A new screen displays with a list of runnable reports. Custom reports appear at the top of the list and built-in reports follow below.

You can configure settings for individual reports by selecting them from the list. Under the Dashboard tab, you can select the report to appear on the dashboard by toggling **Dashboard** graphics options to **On**.

You can set the report to appear on your own dashboard by selecting **Include me as a dashboard viewer** or set it to display on other users' dashboards by selecting a group in the **Dashboard viewers** field. To help you determine who will see the report with your configured settings, the application displays the total number of users who will see the report below the **Display Options** fields.

Use the **Report data configuration** options to set a date range and refresh period for the data the report displays. The **Belonging to** field allows you to limit the data in the report by groups.

Some reports have **Additional report options** which will display at the bottom of the Dashboard tab. These options allow unique customization features for specific reports that need them, such as specifying specific exception rules in the Exceptions Summary report.

If you have finished making changes to your report, select **Save** from the top menu bar to exit the edit page and return to the **Report Views** page.

Save Cancel Export View report S	how All Recipients
Report Default Trips Sur	nmary Report show Help
Report view Dashboard Email report	
Dashboard graphic options:	Yes No
DISPLAY OPTIONS	
Dashboard viewers:	Select groups
	You have not selected any groups
include me as a dashboard viewer.	Yes No
	No one will see the graphic
REPORT DATA CONFIGURATION	
Date range:	Previous hour
	Yesterday
	Previous 24 hours Previous 7 days
	This week
	Lastwook
Refresh period:	Daily 🗸
Next run:	11/05/20 16:38
Pelonaina to:	Calast groups
belonging to:	Select groups
	Everything

If you want a particular report to be sent to users via email, you can use the **Email report** tab to schedule regular emailed reports. Select **Yes** on the **Email options** toggle to open the settings for emailing reports.

As with the **Dashboard** tab, you have the option to select yourself as a recipient using the **Email the report to me** toggle. Select other recipients for the report using the **Recipient list** field. The application will automatically calculate the number of recipients for the report and display it beneath the **Display Options** fields.

You can choose to receive reports as email attachments or download links. In **System Settings** > **Privacy Settings**, you can select whether you want to receive reports as email attachments (Feature Preview). When choosing attachments, you have the option to email reports as PDF or Microsoft Excel files, and to specify a date range for the data. The **Refresh period** field will determine how often the report is emailed to recipients, and the **Next run** field will determine the time at which it is sent. Use the **Belonging to** field to select the data you wish to include in the report by selecting the appropriate groups.

If you have finished making changes to your report, select **Save** from the top menu bar to exit the edit page and return to the **Report Views** page.

### **Customizing Reports**

Using Excel to create custom reports allows for limitless options for analyzing your fleet and driver behavior. Using Microsoft Excel, you can include fleet metrics, charts, formulas, and even match your organization's color scheme for customer facing reports. To customize a report, select it from the list and then select **Export** to make changes.

### Adding Multi-language Support to Reports

Report headings for default reports will be translated into the language currently set by the user. Custom reports can make use of this functionality for any supported language. To add multi-language support for a new report template:

- 1. Create your custom report template.
- 2. Create a new tab with the exact title **Languages**. You can hide it later if you choose.
- 3. Within the Languages tab, label the first column as "English," and the subsequent columns as your preferred supported languages. "English" **must** be the first column. Other languages can be in any order.
- 4. For each other tab (whether a sheet or a pivot table), prefix each English heading you wish to translate with two asterisks. For example, change **Date** to **\*\*Date**.
- 5. Add each of these translated headings to the **Languages** tab, one per line.

### **Running Reports**

While the Administration/Reports section allows you to configure a report, reports are run using the associated feature in the application. This allows you to filter your reports with unique criteria.

Reports are found in the application wherever the **Report** button appears in the top menu of the page. This includes, but is not limited to, the following areas of the main menu and their corresponding reports:

- Vehicles (Watchdog report)
- Activity (Speed Profile, Driver Congregation, Time Card Report, IFTA Report)
- Engine & Maintenance (Engine Faults, Fuel and EV Energy Usage, Maintenances History)
- Zones & Messages (Customer Visits, Planned vs. Actual Route Report, Route Summary)
- Rules & Groups (Exceptions, Groups)

# Dashboard

You can view which reports are set up to appear on your or your users' dashboard(s) and modify their settings by navigating to **Administration** > **Report Setup** > **Dashboard**. The page displays a list of the reports that are currently configured to appear on the dashboard. Custom reports will

appear at the top of the page, followed by built-in reports.

Select the **Preview** button, listed under each report, to view its current settings. To modify the settings of a report, select it from the list to open the **Report** page. It will automatically open to the **Dashboard** tab of the report settings, where you can select which groups you want to assign as viewers, the refresh period for your data, and the time at which the report will update. You can also select the groups from which you want the report to pull data. These options allow you to completely customize who will see the report and what data they will be able to see using the groups you have created.

For more information on configuring reports for your dashboard, see <u>Report Views</u>.

# Dashboard Wizard

The Dashboard Wizard helps you decide which reports to display on the Dashboard. Scroll down on the Dashboard page until you see the **Add Dashboard Reports from Templates** section. To select the reports:

- 1. Select your pillar of interest by checking the appropriate box. Click the **Get started** button.
- 2. Read about the reports related to the chosen pillar and select the ones you want on the Dashboard. Click the **Next step** button.
- 3. Choose the groups that will see these reports on their dashboard. Click **Next step.**
- 4. The application will automatically enable the rules related to the selected reports. Click **Create reports** to finish.

Please note that only users with Company Group access and the appropriate permissions to set up reports can view the **Dashboard Wizard**.



# Interactive Charts (Feature Preview)

Interactive Charts let you visualize, create and display interactive widgets from Excel reports. Widgets, such as the Watchdog Report, can be displayed on your **Dashboard**.

The following report types have an option in the settings. To adjust the Interactive Chart settings, navigate to **Administration** > **Report Setup...** > **Dashboard** and select one of the reports marked with [Interactive] (Feature Preview). The following report types have an **Interactive Chart** option in the settings:

- Device Report
- Exceptions summary
- Trips detail
- Risk management

Save Cancel Remove Export	Update Excel template Show All Recipients				
Report [Interactive] Watchdog ?					
Report view Dashboard Email report					
Add chart to Dashboard:	No A Interactive chart Excel chart				
Users who haven't turned on Feature Preview will not be able to see any <b>Interactive charts</b> on their dashboards. To make sure all users can view this chart, create a duplicate Excel chart.					
	O Preview chart and spreadsheet				
Interactive chart settings: (Layout and template settings)	Keep previous settings Customize				

# **Emailed Reports**

The application offers several options for sending and receiving reports via email. The **Emailed Reports** feature provides a convenient overview of all current emailed reports. If you have not scheduled any reports to be emailed, the page does not display any results.

To schedule emailed reports, you can select the **Show all types of reports** button at the top of the page. Your custom reports are displayed at the top of the list, and all default reports follow. If the report is configured to display on your dashboard, it will be marked as a dashboard report and display the current settings.

Selecting a report from the list will open to the **Email report** section of the report page. You must select **Yes** for the **Email options** to view the options to configure the report.

Email options are divided into three groups:

The **Display options** section determines who will receive the report. Select the groups and users you wish to be recipient from the **Select groups...** and **Select users** dropdown lists. You can also choose to send the email report to yourself using the **Email the report to me** toggle. The application displays a count of how many people will receive the report based on your selections.

The **Redirect report** option sends the report to an individual. Users can send a test version of the report to themselves, or another individual in order to verify the contents of the report. When satisfied, turn **Redirect report** off to send the report to the target audience.

The **Report data configuration** options allow you to specify the type and range of data in your report. You can choose to receive your report as either a PDF or Microsoft Excel file. Select a date range from the provided options, and select a refresh period to control how often the data updates and triggers a new email. The application will automatically populate the **Next run** field with an editable date and time. Finally, select the groups from which the report will pull data using the **Belonging to** field.

Some reports use additional filters and options to customize your data. These are shown in the **Additional report options** section. You may choose to run the report by device, by vehicle, or by driver, or may be given other options such as zone type, exception type, or grouping options. The application automatically populates the available options for the selected report; if no additional options are available, the section will not appear under the Email options tab.

#### SendReport

Emails the report using a conditional flag based on calculated values, or by setting the condition to True. The application has

	<ul> <li>more options for sending reports via email, which vary for each report.</li> <li>1. Navigate to Administration &gt; Reports &gt; Emailed reports.</li> <li>2. Select the desired report.</li> <li>3. Select the Email report tab.</li> </ul>
Opt in/out of receiving email reports	Allows Administrators to opt new users in or out of emailed reports from the <b>UI Settings</b> page. Existing users are set to <b>On</b> by default but can opt out of receiving email reports themselves.
	All users — regardless of authentication type (Basic, SAML, MyAdmin), that have been added through the Fleet Management Application — are opted in by default.

# Sending and Receiving Emailed Reports

The following reference guide shows how the display options affect who will receive the emailed report. In this example:

- The report audience is the executive group;
- Alice sets up the report options; and
- Bob receives the report for testing.

Redirect	When SendReport is	SendReport (in report)	Send to myself	Report Recipients
On	True	True	n/a	Bob
On	True	False	n/a	No one
On	False	True	n/a	No one
On	False	False	n/a	Bob
Off	n/a	True	On	Exec, Alice
Off	n/a	True	Off	Exec
Off	n/a	False	On	No one
Off	n/a	False	Off	No one

Opting In/Out of Receiving Email Reports

As an Administrator, you may want to control who can and cannot receive emailed reports. This can be done through the **UI Settings** tab of the **User Edit** page. Navigate to **Administration** > **Users** and select a user from the list to modify. Under the **UI Settings** tab, toggle **Receive email reports** to **Off**. The user will no longer receive email reports.

All users — regardless of authentication type (Basic, SAML), that have been added through the Fleet Management Application — are opted in by default. Existing users can opt out of receiving email reports themselves by navigating to **Options** > **Main Settings** > **UI Settings** and toggling **Receive email reports** to **Off**.

### **Email Limitations**

In order to preserve the quality of service when using the application there are a number of limitations applied to the number of emails which can be sent at a time, and the size of each

individual message.

- Attachments cannot exceed 25 MB.
- The total data usage of emails per hour cannot exceed 1000 MB.
- The total number of emails sent in an hour per rule cannot exceed 1000.
- The total number of emails sent in an hour per report cannot exceed 1000.

### **Disabled Reports**

A report will be disabled if it violates the email limitations or becomes too slow to open. If this happens, the following notification will be displayed:

This report was automatically disabled due to performance issues. It can be re-enabled, but it will still be subject to the performance monitoring that initially disabled it. If this happens again, it is likely that there is a problem with your report. Please contact support for help.

When this happens, please examine:

Template Macros	Macros can slow down a report. A macro that was working well with a small number of vehicles might not scale if you have increased your fleet.
Number of vehicles	If the number of vehicles in your fleet has recently grown, you might consider splitting your report into multiple reports.

After you have made your changes:

- 1. Navigate to **Administration** > **Reports** > **Emailed reports**.
- 2. Select the desired report.
- 3. Toggle Email options to **Yes**.

### Users

As an Administrator, you can modify settings for users and customize security clearances through the **Users** page (**Main menu** > **Administration** > **Users**.) The **Users** page displays a list of basic profile information for all users, including first and last name, email address, last access date, and security clearance. Users can be modified by selecting their name from the list. For more information on modifying users, see **Editing Users**.

The options in the top menu allow Administrators to reorganize and filter the users list to best suit their needs. Users that have been archived, and no longer have accounts, can be displayed by toggling the **Show archived (historical)** button on or off. Users can also be filtered by **Active** or **Suspended** status using the **Filter** dropdown menu. Users can also be filtered by rulesets and authentication types (currently in Feature Preview).

The **Clearances** button at the top of the page redirects to the **Security Clearances** page. Here, you can view the current security clearances available for your users, or create new clearances by selecting an option from the list, and selecting **Add sub-clearance**. For more information on clearances, see <u>Clearances</u>.

### Adding Users

Users can be added by navigating to **Administration** > **Users** and selecting the **Add** button at the top of the page. This opens the **Add User** page, where you can customize a variety of settings for the individual user.

Once you have selected your settings, select the Save button at the top of the page. Your new

user will appear in the list of users, with their name, email address and company group displayed (if they have been assigned to a group.) Once they have logged in, you will also be able to see their last login date.

For more information on selecting settings for your users, see Editing Users.

### **Removing Users**

To remove a user, navigate to **Administration** > **Users** and select a user to remove. In the **User Edit** feature, select **Remove** from the top menu and confirm your selection.

You can retain a user's data in the system while removing them from lists of users and reports by selecting **Archive** in the confirmation message box. You may consider using this option if you would like to retain the user's data for future reporting purposes.



## **Editing Users**

To edit an existing user, navigate to **Administration** from the main menu, and select **Users** from the submenu. Select a user to edit from the list.

The User Edit screen organizes user settings under five tabs:

- **User**: User/Employee settings and assigned groups;
- Driver: Driver ID settings;
- UI Settings: Set display options;
- Map Settings: Select map options;
- HOS Settings: Select HOS options;
- System Communications: Opt in to news and service notifications; and
- **Support**: Designate users as contact for your organization.

As an Administrator, you can opt in to receiving system notifications when user settings are changed. Notifications display the date on which changes were made and the properties that were changed.

**Note**: Individual users can configure these settings for themselves in the **Options** menu. If you do not want a user to be able to access these settings, you must set the appropriate security clearance for them. If none of the default clearances meet your needs, you can create a custom sub-clearance for your users and remove **Change your own user options** from the **Access to feature** list. For more information on how to set clearances and create sub-clearances, see <u>Clearances</u>.

#### **User Settings**

The **User Settings** tab configures basic profile information and access settings for individual users. Here, you can edit your user's name, email address, designation, and employee number.

These settings also allow you to set a security clearance for your user and adjust their access to

data. The **Security clearance** field is populated by the designations configured on the **Clearances** page (for more information on configuring clearances, see <u>here</u>.) This allows you to customize access to the application for individual users.

The **Data access** field is populated by your organization's **Groups**. Assigning users to specific groups allows them to access the data they need while protecting data that should be kept private. For example, if your organization operates in multiple regions, you may want to use regional groups to prevent users from accessing data from regions other than their own. For more information on groups, see <u>here</u>.

#### **Driver Settings**

The **Driver** settings tab configures settings for users who are drivers. In order to configure these settings, you will first need to toggle **This user is a driver** to **On** at the top of the page. Once this option is selected, the remaining driver options will display below.

If you use driver keys to identify drivers in your fleet, you can add a driver key for the user under the **Keys** heading. You will be prompted to enter the type of key and its ID number before saving.

Toggling the **Prevent driver access to shared data** toggle to **On** will prevent the driver from having access to any data in the application that is not his or her own.

### **UI** Settings

The **UI Settings** tab allows you to customize the application for users based on their regional and UI preferences. These preferences include:

- Measurement systems (Metric or Imperial)
- Fuel economy measurements, including electric energy measurements
- Date and time formats, including your user's time zone
- Language
- Default page at start-up
- The ability to receive email reports
- The ability to view Feature Preview functions

### Map Settings

The **Map Settings** tab configures the **Map** function for the user. Here, you can select the default map type displayed in the Map function, including the default map view (for example, some users may use the **Roadmap** view, while others may need the **Terrain** view.)

Any **Map views** the user has saved will also appear here in a ranked list in the **View organizer** field. The view at the top of the list will be the default view shown when the user opens the Map function. You can create new map views using the **Views** option in the **Map menu**. For more information, see <u>here</u>.

#### **HOS Settings**

The **HOS Settings** tab allows you to select different options for your user's HOS ruleset if your user is a driver.

The **Ruleset** field allows you to select a ruleset for your driver from more than 50 options based on regional requirements. You can also specify the start time for your driver using the **Start of day** field below.

The **Yard move allowed** and **Personal conveyance allowed** buttons allow you to toggle these privileges on and off. When the privileges are toggled **On**, the driver will be able to apply these exemptions in the application.

The application also allows you to specify information such as the driver's home terminal, the terminal address, and the driver's carrier number if desired.

#### Support

The Support tab allows you to designate users in your database to act as contacts for support, training, and procurement questions. A user who is designated as a contact for one of these areas should be able to answer questions from your telematics providers on behalf of your organization.

To assign a user as a contact, toggle the appropriate contact category to **Yes**. Users can be assigned as contacts for questions about support, training, or procurement within your organization. A single user can also be a contact for more than one of these categories.

**Note**: User contacts must have a phone number associated with their account that can be used to reach them during normal business hours. If a user is selected as a contact, but does not have a phone number listed on their profile, you will be prompted to add one before leaving the **Support** tab. Phone numbers can be added under the **User** tab of the **User Edit** page.

## Unlocking Users

Locked users are displayed with a red lock icon beside their name. Administrators answering the call from locked users can unlock them from the **Users** page.

To unlock a user:

- 1. Click the locked user's name to open the **User Edit** page.
- 2. Click the **Unlock** button on the top bar. A popup box will appear. Click **Unlock** to unlock the user or **Cancel** to return to the **User Edit** page.

### **Editing Multiple Users**

If you want to make the same changes to a number of user accounts, you can use the dropdown list in the top right corner to select multiple users. The **Select individual** option allows you to select multiple individuals from the user list to edit. The **Select visible** option will select all users in the visible list to edit. You can refine your user list using the search box in the top menu.

Select the **Edit multiple users** button in the top menu to open the **Edit multiple** page where you can modify all selected users. The user count will be displayed in the page title, and a popup will appear at the top of the page reminding you that you have multiple users selected.

### Clearances

Security clearances control a user's access to specific features of the application.

Security clearances are assigned to users in the **User Edit** feature, but managed using the **Security Clearances** page. To assign a security clearance to a user account, navigate to **Administration** > **Users** and select one or more users to edit. Under the **User** tab, use the **Security Clearance** dropdown menu to select the appropriate clearance for your user.

If you would like to modify existing security clearances or add a custom clearance, select the **Clearances** button from the **Users** page.

The application defines the following <u>security clearances</u> by default. If the default clearances do not meet your requirements, you can create customized sub-clearances as follows:

- 1. Select an existing security clearance.
- 2. Select the Add Sub-Clearance button.
- 3. Modify access to individual features by selecting the check mark or the cross button.
- 4. Name the sub-clearance.
- 5. Select **Save**.

Note: Sub-clearances must be assigned to users before they can take effect.

Marketplace Clearances

By default, users will see all available marketplace applications. These include both free and paid applications, as well as applications developed by third-party vendors. Administrators can customize the types of applications visible to the user as follows:

Show/hide third-party applications	<ol> <li>Select Administration from the main menu.</li> <li>Select System &gt; System Settings.</li> <li>Go to the Marketplace tab.</li> <li>Toggle Display third-party apps.</li> </ol>
Show/hide paid applications	<ol> <li>Select Administration from the main menu.</li> <li>Select Users.</li> <li>Select the Clearances button from the top menu.</li> <li>Select a clearance to modify.</li> <li>Select Add Sub-Clearance.</li> <li>Check/uncheck View paid items in the Marketplace.</li> <li>Name your sub-clearance and Save.</li> </ol>
Show/hide Marketplace entirely	<ol> <li>Select Administration from the main menu.</li> <li>Select Users.</li> <li>Select the Clearances button from the top menu.</li> <li>Select a clearance to modify.</li> <li>Select Add Sub-Clearance.</li> <li>Check/uncheck View advanced help items.</li> <li>Name your sub-clearance and Save.</li> </ol>

# System

The Fleet Management application offers an intuitive and flexible interface to manage your fleet. System Administrators can apply a number of different preferences to their fleets and users to customize the application to their needs.

### System Settings

The **System Settings** page offers a number of different settings for your organization. These settings are grouped in seven categories: **General**, **Maps**, **User Account Policy**, **Add-Ins**, **Purge** (Feature Preview), **Marketplace**, and **Certificates**. These sections are discussed in further detail below.

To access the System Settings page, use the main menu to navigate to **Administration** > **System...** > **System Settings**.

The General tab settings allow you to edit and add information to your company profile, such as name, address, industry, and percentage of fleet using the Telematics Device. It also allows you to customize various basic, application-wide settings, such as risk management speed bands, maximum personal conveyance distance, and whether Resellers are allowed to access your databases by toggling **Allow reseller access** to **On** or **Off**.

**Note**: By default, this feature is toggled to **Off**. However, if your database was registered by your Reseller, this feature is toggled to **On**. If you want to restrict Reseller access to your database, you must toggle the feature back to **Off**.

Save						
System Settings 🛾	Show Help					
General Maps User Account P	olicy Add-II	ns Purg	e Marketplace	Certificates	Support	Privacy setting
COMPANY PROFILE						
Company name:	Longram (d)					
Company address:	18.41 Minutes	Path Dise		Stad or	one solo	ad
Industry:	Manufacturi	ng/Technolo	ду			~
Percentage of leased vehicles:	Unspecified	0%	25%	50%	75%	100%
Percentage of vehicles using telematics:	Unspecified	0%	25%	50%	75%	100%
Are you a government organization?	Yes		No			
RESELLER INFORMATION						
Reseller name:	Depairing.					
Allow reseller access:	Yes		No			
RISK MANAGEMENT						
Speed band 1:	96.6		km/h			
Speed band 2:	120.7		km/h			
Speed band 3:	120.7		km/h			
Grace period:	16		seconds			
ROUTING						
Enable routing features:	On	C	Dff			
HOS EXEMPT						
Custom exemption name:	Exempt HOS					
Exemption abbreviation:	XEMP					
OTHER						
Custom code:	DVIRINSPEC	FORROLE,SH	IAREDEVICE, USE_CU	BE_FOR_REPORT,	USE_YARDMO	VE_E
Email sender name:	NotificationS	ender	@gestabutom	0		
Maximum personal conveyance distance:	0.0		km			

### Maps

Under the Maps tab, you can select the map provider you wish to use for the Map function of the application. The application provides several options for maps; selecting an option from the list will make that map available to all users of the application.

The application also provides the ability to create a custom map, or to add a map from a

template. You can use these features to provide additional map providers for your users.

#### **User Account Policy**

**User Account Policy** settings allow Administrators to help ensure account security, protect user information, and prevent unauthorized access to the application using a variety of security settings.

Password policy settings help ensure account security by compelling users to set a unique password composed of upper and lowercase letters, numbers, and symbols. Passwords must be a minimum of eight characters and cannot include the user's username, first name, or last name. Other requirements, such as numbers, symbols, and uppercase letters, are optional and can be toggled on and off.

PASSWORD POLICY		
Minimum password length:	8	
Require an upper case letter, A- Z:	On	Off
Require a lower case letter, a-z:	On	Off
Require a number, 0-9:	On	Off
Require a symbol, like \$ or @:	On	Off

The Password Expiry toggle compels the user to set a new password after a specified time. Toggling this option to **On** will open a field to set the number of days before a password reset is required. This feature is toggled to **Off** by default.

PASSWORD EXPIRY		
Enable password expiry timer:	On	Off
Reset password after:	30	days

The Account Suspension option prevents a user from logging in if they have been inactive for a set number of days. Like the Password Expiry toggle, this option must be toggled **On** to allow the Administrator to set the required number of days, and is toggled **Off** by default.

ACCOUNT SUSPENSION $\Delta$		
Enable account suspension timer:	On	Off
Prevent login if the user (excluding MyAdmin user) has no activity for:	60	days

The **Idle Session Timeout** feature automatically logs users off after a set period of time. Administrators should be aware that enabling this feature results in a brief timeout for drivers using the application that may result in non-compliant ELD operation.

**Note**: Idle Session Timeout and Account Suspension are currently in Feature Preview and not enabled by default. To enable these features, turn on **User timeout period** under the **Feature** 

**Preview** tab by navigating to **Administration** > **Users** from the main menu. From the **User Edit** page, toggle **User timeout period** to **On** and click **Save**.

IDLE SESSION TIMEOUT $\Delta$		
Enable idle session timeout:	On	Off
Expire user session if the user has no activity for:	30	minutes

The **Previous Password Reuse** feature determines whether a user can reuse an old password when updating their password. The default state for this toggle is **Yes**, which allows for reuse.

PREVIOUS PASSWORDS REUSE		
Allow password reuse:	No	Yes
Remember the last:	3	passwords

The **User Lockout** feature allows the Administrator to limit users to a certain number of password attempts before they are locked out of the application for a specified time. Failed login attempts are automatically set to 3, with a lockout time of 30 minutes.

USER LOCKOUT		
Enable user lockout:	On	Off
Failed login attempts:	3	
Authentication period:	15	minutes
Lockout time:	30	minutes

**User Authentication Types** defines the types of authentication accepted by the application. Administrators can choose to allow basic authentication logins, or SAML logins, or both.

We recommend that users utilize SAML 2.0 to manage their accounts. SAML enables single sign-on (SSO) in which users log in to the Telematics Provider platform once, then reuse the same credentials to log into the Fleet Management Application. This ensures that user account password strength and multi-factor authentication (MFA) requirements are enforced by the Identity Provider (IdP).

Users that do not use SAML 2.0 should use strong password policies. You can set password policies by navigating to **Administration** > **System** > **System Settings** > **User Account Policy**.

We recommend the following **User Account Policy** settings:

- Minimum password length: 8
- Require an upper case letter, A-Z: On
- Require a lower case letter, a-z: On
- Require a number, 0-9: On
- Require a symbol, like \$ or @: On
- Enable password expiry timer: On
- Reset password after: 90 days

- Allow password reuse: No
- Enable user lockout: On
- Failed login attempts: 5
- Authentication period: 10 minutes
- Lockout time: 30 minutes



#### Add-Ins

The **Add-Ins** settings tab allows you to manage existing and new Add-ins for the application. Existing Add-ins display below the options on the page.

To add a new Add-in to the application, select **New Add-In**. In the popup window that opens, you can click the **Files** tab and select a file to add, or drag and drop it into the window. Select the **Add** button to browse your computer for files, and select the red **Remove** button to remove unwanted files from the window. When you have made your selections, select **OK** in the bottom right-hand corner of the popup window.

The **Allow unsigned Add-Ins** toggles gives Administrators the option to allow unsigned Add-ins to be added to the application. Toggling this option **On** will generate a red banner warning:

You have allowed unsigned Add-Ins to run on your system. Unsigned Add-Ins have full access to your system, and should only be enabled if you created the Add-Ins, and performed a security audit.

Toggling this option to **Off** will prevent unsigned Add-ins from being added to the application.

#### Purge

In certain situations, it may be necessary to purge data from a Group. The **Purge** feature allows you to permanently delete certain types of data, including private data, at specific time intervals. You can set up to 20 purge schedules.

To use the Purge feature:

- 1. Navigate to **Administration** > **System...** > **System Settings** from the main menu.
- 2. Under the **Purge** tab, toggle **Routinely purge older data** to **On** to enable Purge Settings.
- 3. Click **Add Purge Schedule** to set a purge schedule for a Group, then select the schedule to expand purge settings.
- 4. Select how long you want to keep each data type and when the selection period passes, the data will be permanently deleted.
- 5. Click **Save**. A popup window displays the following message and prompts you to enter your password to enable the purge.
- 6. Click the **Enable** button. After you enable a purge, all the Administrators on your server will receive a notification.

### Marketplace

The Marketplace tab allows Administrators to control the visibility of third-party apps within the application and to toggle permissions on and off for users to make purchases in the Marketplace. Applying these settings here enables or disables them for all users. To configure these settings on a per-user basis, you can use the **Clearances** function of the **Users** page to assign users clearances that allow them to access these privileges. For more information on clearances, see

#### <u>here</u>.

### Certificates

For single sign-on SAML users, the **Certificates** tab is no longer Feature Preview. Certificates can be found under **Administration** > **System...** > **System Settings**.

Select **Add new certificate** to add a certificate. You will be prompted to enter the certificate issuer, the login URL, and the logout URL. Use the drag-and-drop window to add files from your computer. Select the green **Save** button to save your changes and add the new certificate.

### Support

The **Support** tab allows you to designate contacts within your organization to answer questions about company support, training, and procurement. Use the dropdown menus to select users who can fulfill these roles, or click **Add new user** to add a new user as a contact.

Designating users as contacts can help provide training opportunities for new features that may be relevant to your organization, and helps streamline communication for support issues.

### **Privacy Settings**

The application offers the ability to exclude particular data points from email, web, and text notifications using the settings available under the **Privacy Settings** tab. Use the dropdown filter menu to select data to exclude; your choices will immediately appear in the **Exclude data** field. You can add or remove data points at any time.

### Audit Log

The Audit Log lists notable activity within the application and is useful for tracking changes to your account when multiple users have administration access.

Use the **Options** menu to select the types of audit logs you wish to view from the dropdown menu, and your desired date range. You can also select individual users from the **Users** dropdown menu. Select **Apply changes** to view your results.

We recommend a regular review of the **Audit Log** as part of your account management process. Key audit log items to review include: **User login**, **User logout**, and **Edit system settings**.

Other audit log items to review periodically include: View users, Add user, Delete user, Security Clearance change, Email sent, Edit user.

Back to Top

# Marketplace

### Roadside Assistance

Intelligent communication and early detection features help to predict engine health and prevent costly repairs. However, unforeseen roadside events such as minor collisions, flat tires, and low fuel supply can disable a vehicle just as quickly. The **Roadside** Add-In is an easy-to-use, driver-friendly solution for dispatching roadside assistance to vehicles in distress.

If a driver is assigned to the vehicle and a VIN is available, the **Roadside** Add-In auto-completes the request and displays the vehicle's position to nearby service providers. Live positional updates with an estimated time of arrival keep drivers informed as the service vehicle approaches the scene.

To request assistance, navigate to the **Roadside** Add-In in the main menu, select **Create Service Requests** and follow the on-screen instructions. The application searches for nearby service providers and when found, dispatches them to the location displayed on the map.



When the service provider arrives, the status automatically changes to **Service in Progress** until you tap the **Continue** button to complete the service.



The **Roadside** Add-In is available on the Marketplace to U.S. and Canadian fleets and provides services such as towing, locksmith, battery boost, fuel delivery, flat tire change and more. For a complete list of services and benefits, visit the Marketplace and contact your sales provider to find out if you qualify.
# Analytics Lab

The Analytics Lab is a suite of experimental Apps designed to provide performance insights that help fleets make informed business decisions. Using fleet telematics data, the Analytics Lab combines easy-to-use Apps with templates and models from the API Explorer to analyze, visualize, and uncover trends in your fleet's operations. To view the Analytics Lab page, users must have the View Analytics Lab security identifier, and must have access to all devices on the page.

### Back to Top

# Software Development Kit (SDK)

We recognize that when you've invested significant time and money in your IT infrastructure, you want to get the most out of it. You can integrate your fleet telematics data into your own software by leveraging our easy-to-use software development kit (SDK).

With the SDK you can create new reports, schedule data requests to import to your own software or even build entire applications centered around your own fleet. You will be able to get started quickly and find help when you need it easily with dedicated and responsive support channels.

# Supported Platforms

Whether you are building a web, mobile, or a desktop application with the SDK, there are many options for programming languages to use. The SDK is available in the following ways:

- HTTP JSON web service
- Native C# library
- Native JavaScript library

# **Getting Started**

Start developing today using our comprehensive getting started guides, sample projects and more. Get involved, ask questions, and have them answered by dedicated support staff focused only on our telematics products.

# **Result and Rate Limits**

Select APIs are limited by the number of results that can be retrieved in a single request, and the rate at which an API can be requested. Result and rate limits are intended to encourage API developers to use appropriate APIs for a given use case, as well as to safeguard against unbounded requests.

Read the SDK documentation online, which includes links to download the latest SDK and samples. Get involved with the community by visiting our forums.

Back to Top

# Aggregate Data Access

As part of the Telematics Fleet Management Application, you have access to an aggregate data product from well over one million vehicles that has been segmented into three core areas — Urban Infrastructure, Weather, and Location Analytics.

You can use these products to gain valuable insights that support your fleet management operations. The data includes information such as hazardous driving locations, road impediments, hyperlocal temperature and precipitation, and service center and parking availability. Read the aggregate data documentation online, which includes links to access the data and view code samples. This data is subject to standard access terms.

<ul><li>Idling Areas</li><li>Searching for Parking</li><li>Intersection Insight</li></ul>
<ul> <li>Hyperlocal Temperature</li> <li>Hyperlocal Barometric Pressure</li> <li>Hyperlocal Precipitation</li> </ul>
<ul> <li>Service Centre Metrics</li> <li>Fuel Station Metrics</li> <li>Truck Parking Locations</li> </ul>

# **Business**

## Feature List

A complete list of features for the Telematics Device and the Fleet Management Application can be <u>found here</u>.

### Back to Top

## **Business Examples**

Learn how businesses use our telematics solution to control costs through saving time and costs of operating their fleets. Below are recent examples of what our Customers have done to get the most out of our system.

### Safety

- Set up exceptions for dangerous driving:
  - $\circ \;$  speeding against posted speed limits.
  - harsh brake.
  - dangerous lane changes/aggressive driving.
  - $\circ$  after hours use.
  - $\circ~$  driving with no seat belt.
- Limiting backing up (and ensuring backing first).
- Seat belts are used much less than expected by monitoring, compliance can go from 80% to 99.8% (large fleet case study).
- Notify the driver by buzzing in the vehicle.
- Driver safety scorecard.
- Who to email/alert in case of collision set up a procedure when a collision happens:
  - $\circ~$  Auto retrieve.
  - Collision reconstruction from data.
- Detect distracted driving big issue.

### Productivity

- Import Customers using the built-in wizard or use the SDK to sync Customers in from another system automatically.
- Use groups for different Customer types. That way reports will group and categorize

automatically.

- Get minutes per Customer visit or minutes spent visiting by category.
- In an actual case study, a large company using our solution saves 3% on labour by monitoring how much time was done doing their Customers' deliveries.
- Report the number of Customers visited by each driver per day.
- Manage the time employees are at the office. Paid time vs. personal time (lunch and break abuse).
- Look at the total time each day employees spend driving slowly or idling (i.e. caught in traffic).
- Graphically monitor day's trips with exceptions. In an actual case study, a large company using our solution saved more than 2% of their mileage by avoiding bad driver decisions like bad routing or unnecessary stops.
- In an actual case study, a large company using our solution reduced the supervisor. headcount from 30:1 to 50:1 by using the application as a tool to manage driver activity
- Set up allowed time for stops, and through routing get planned routes vs. actual activity
- Set up allowed travel times and compare planned vs. actual.
- Dispatch Overlap.
- Excess Miles Best route taken? Off Area Mileage?
- Segmented analysis of work day.

### Fleet

- Roadside Add-In for requesting help during roadside emergencies. \*USA and Canada only. Contact your sales provider for qualifying plans.
- A fuel-saving calculator spreadsheet is available to show the fuel savings from managing using our solution.
- High CO ratio detected by engine computer indicates vehicles wasting fuel and needing service.
- Fuel is saved by limiting idling buzz in cab and exception rule. Accurate fuel and CO2 measurement during idle time.
- Enhanced idle time measurement:
  - Beginning of Trip Idle Time (actionable)
  - End of Trip Idle Time (actionable)
  - Expected/Planned Idle Time per Route (Traffic Delays) (while not actionable, knowing this will tell you the best time that can be obtained)
- Miles per gallon and mileage compared against peers.
- Mileage Reduction.
- Email can be sent when the vehicle engine warning light is on vehicle needs maintenance.
- Email can be sent when an employee leaves their car lights on or the battery is going to fail.
- Email can be sent when the alternator fails.
- Use the application to set up service intervals, tire rotation or even lease expiration.
- Service intervals are based on odometer readings taken automatically from vehicle or by total engine hours (better metric for maintenance).
- The application automatically makes available, accurate odometer and VIN for every vehicle.
- The watchdog report is used to identify failed or tampered units.
- An advanced user can use the vehicle engine codes to identify exactly what is wrong with a vehicle without even needing a diagnostic scan tool.
- For asset utilization, the application can tell what percentage of vehicles are not being driven over time and by region. In an actual case study, a large company using our solution reduced their unused assets to 4% from the industry standard of 10% or more

- Prioritized engine fault codes.
  - $\circ~$  Ability to filter out noise or non-actionable events.
  - Optional integration with Asset Management System to open work orders.
- Fault code knowledge base optional integration with Asset Management System to provide repair data.
- Best repair practices:
  - Data provides repair information
  - Reduced unneeded parts expense
- Condition exceptions and threshold alerts based on similar vehicles (peers).
- Scheduled component (brakes, starter, filters, alternator, etc.) maintenance based on:
  - Ignition Cycles
  - Hours
  - Miles
- Grade component (brakes, starter, filters, lubricant, etc.) wear based on driving habits (for example, jack rabbit starts, harsh braking, etc. all cause accelerated wear).
- Measurement of repair effectiveness. Was the condition fixed the first time? Is there a direct correlation to breakdowns?
- Breakdown analysis: breakdowns vs. vehicle data. Could break down have been prevented?
- Provide mechanic with vehicle location. Reduces vehicle obtain time.

### Dispatch

- Find address or Customer by Customer name.
- Find vehicles closest to an address or Customer.
- Select to send a message to Garmin GPS within a vehicle to dispatch to that location or navigate the driver there.
- Routes can be set up and drivers dispatched to a route with automatic navigation to all destinations.
- Statuses can be used by the driver in the Garmin to alert dispatcher about their availability
- Many reports to look at time spent driving, time spent stopped, etc.

### Sustainability and Regulatory

- Hours of Service regulations
- Driver Vehicle Inspection Report
- IFTA Fuel Tax reporting
- Tax Mile Accuracy and Private Property Mileage Exclusion

### Back to Top

# What's New

# Firmware Release Notes for Telematics Devices

For the latest Firmware Release Notes, click here.

For the Firmware Product Guide, click <u>here</u>.

# **Application Release Notes**

8.0.0

### **General Updates**

- Registration
  - Moved the check for database name already in use to the end of the registration process.

- Rules
  - Updated diagnostics to detect backing up when leaving for better accuracy.

### • Assets

- The Trailers page has been moved to the Vehicles & Assets menu section, and trailer functionality has been expanded to include adding telematics devices to trailers, leveraging maintenance reminders for trailers, creating trailer rules, and archiving trailers.
- Added message about Telematics Device Version 9+ Wi-Fi hotspot being rate limited on the Asset Edit page.

#### • Groups

- Added new built-in groups for managing assets: asset information, asset type, and electric vehicle powertrain systems.
- Released the Global Groups filter feature. This feature is out of feature preview.
- The default timezone has been updated to be based on user timezone.
- User
  - Groups and data access have been divided into separate properties to provide more control over users' access to groups and data.
  - Added operators AND and OR to configure user data access.
- Reports
  - Added operators AND and OR to Groups functionality.
  - Added toggle for including or excluding archived assets for the Fuel and EV Energy Usage report.

#### • Maps

- Added the ability to share an asset's location with a third party for a set period of time.
- Updated the layout of the asset list on the Map.
- Added new asset cards to the Map that display asset information and allow the user to access asset-related reports.
- Updated the auto zoom and auto list features on the Map to make it easier to match the map with the assets listed in the sidebar.
- Improved the asset clustering feature.
- Added the Asset status filter to filter your assets based on whether they are driving, stopped, or not communicating.

### • Engine & Maintenance

- Added the new EV Battery Health report to track capacity loss of EV vehicle batteries.
- $\circ\;\;$  Added the ability to skip and snooze maintenance reminders for assets.
- Added ability to Import Maintenance Records by searching for VIN or asset name.
- Routing
  - Ongoing improvements to the Route feature, including adding address and zone search fields, the ability to repeat routes, and updates to route labels.

### • Public Works

• Added the Live Service Map feature to provide near real-time completion conditions of roads.

### • Asset Monitoring

- Added option to refresh at intervals.
- Grid view now 'remembers' page configuration when returning to the page.
- Added options to the asset monitoring page to switch between full map view, full table view, or split screen view.
- Added option to download report of most recent data present in the grid view.
- $\circ~$  Added ability to view historical sensor data for assets.
- Added ability to view exceptions that triggered below the map during a trip.

- Added ability to view data on both a graph and an accompanying table.
- SDK
  - Added RailroadExemption.
  - Added America7DayRailroad and America8DayRailroad.
  - Updated repairs to prevent changes once they have been set and to ensure repairs cannot be completed without mandatory criteria.
  - Removed deprecated viewport property from ZoneSearch.
  - Added EVBatteryHealthReport.
  - Added IsAdverseDrivingApplied and IsRailroadExemptionAvailable.
  - Added IsAdverseDrivingEnabled.
  - Searching for CustomDevice type has been fixed to only return devices of CustomDevice type.
  - Added NFC, Bluetooth, and UReader add-on types.
  - Updated the Audit API so that only userName will be returned in the Audit object.
  - Removed obsolete alpha Data property.
  - Improved description of GroupRelations in API Reference.
  - Update to allow client to use HTTP/2 and above.
  - Updated zone points to latitude and longitude bounds.

#### **Hours of Service Updates**

- Activity
  - Fixed a bug involving the display of Canadian daily hours of service on the HOS Logs and HOS Violations pages.
  - Added the option to transfer ELD data by vehicle(s).
- Administration
  - Added entries for users accessing the HOS Availability and HOS Violations pages to the audit log.
  - Added the ability to configure Adverse Driving Conditions in the application to prevent inappropriate use.

#### **HOS Rulesets and Exemptions**

#### • Changes to Canadian daily off-duty violations for cross-border drivers

 Daily off-duty violations are no longer generated when a driver switches from a Canadian to a US rule set. Intended for cross-border drivers on the day they cross from Canada to the US. Note: Violations are still generated if the remaining time in the day is insufficient to meet the daily off-duty requirement.

### • Renamed Canadian rulesets

• Renamed the Canadian rule sets based on 60°N latitude to match the exact wording specified in Canadian regulations.

### • Added support for FMCSA railroad exemption

- Added support for the FMCSA railroad exemption as described in FMCSA—2020—0171.
- Updates to exemptions
  - The Exemptions screen now indicates which exemptions are unavailable. Also made the following changes to the Adverse Driving Conditions exemption:
    - Now only available while on-duty and applied to the current shift. Cannot be retroactively applied to previous shifts.
    - A banner is displayed at the top of the page while the exemption is active.
    - The driver can manually remove the exemption status.

### **General Drive Updates**

• Lock screen improvements

- MYG-32183 Made the following changes to the lock screen:
  - Lowered the vehicle movement threshold required to initiate the lock screen.
  - Implemented a quicker and more reliable method of detecting vehicle movement.
  - Canadian drivers (based on selected rule set) can no longer exit the lock screen while the vehicle is moving. We have plans to make this change for other jurisdictions in a later release.
  - Changes will also be retroactively applied to Drive App versions 6.0 and 7.0.

### • New built-in groups

• Added new built-in groups for managing assets: asset information, asset type, and electric vehicle powertrain systems.

### • SDK Updates

- Added RailroadExemption to the DutyStatusLog object.
- Added America7DayRailroad and America8DayRailroad to the list of supported rulesets.
- To complete a repair on a DVIR, three parameters must be provided (RepairUser, RepairDateTime and RepairStatus). In addition, these properties can no longer be edited once they are set.
- Added IsAdverseDrivingApplied and IsRailroadExemptionAvailable to the DutyStatusAvailability object.
- Added IsAdverseDrivingEnabled to the User object.

# 7.0.0

### • Users

• Restricting the use of username, first name and/or last name in passwords is no longer optional. This rule is now applied automatically, with no option to disable it.

### • Rules

- Added Electrical System Rating (ESR) Health rule for predictive maintenance.
- Included option to apply truck speed limits to speeding rule with one click on the Rules page.
- Added telematics device version 9+ Wi-Fi hotspot customizable usage limit rules.
- Vehicles & Assets
  - Released the Asset Edit page. The feature is out of Feature Preview.
  - Updated Extendable Services to allow services to be extended from assets with subscriptions to eligible third-party device plans.
  - Added option to defer incoming Extendable Services requests.

### • Engine & Maintenance

- Updated severity values of WWH-OBD to be displayed on the Engine Faults page.
- Map
  - Moved the Routes page from under Zones & Messages to under the Map menu.
  - $\circ$   $\;$  Moved the Send to vehicle button to the Route Edit page.
  - Added ability to duplicate routes.
  - Changed the color displayed for planned vs actual routes on the map.
  - $\circ~$  Added an arrow to show the trip direction when viewing a route on the map.
  - $\circ~$  Added ability to navigate to the current route assigned to an asset on the map.

### General Improvements

- Added currency support for Thai Baht.
- Ended support for Fleet Management Application version 1.0.0.
- Stopped storing Rate Plan for the Telematics Device when an asset is archived.
- Enabled editing for routes that have been completed (Feature Preview).
- Added support for kWh/km and kWh/mile units of measurement in user profiles.

- SDK
  - Removed exception types that expose the database provider or platform-specific error messages in infrastructure exceptions from the API.
  - Added validation of user passwords against a list of common passwords. Common passwords will return PasswordPolicyViolationException.
  - Added validation for user passwords against username, first name, and last name. Passwords that contain a username, first name, and/or last name will return a PasswordPolicyViolationException.
  - Lowered the maximum number of active user sessions to 100.
  - Added ModifyGroupFilter and ViewGroupFilter to SecurityIdentifier.
  - Added CaliforniaPropertyShortHaulWithRest, CanadaOil, CanadaNorthOf60Oil, CanadaOilTeam, and CanadaNorthOf60OilTeam properties.
  - Added RateLimitKbps property.
  - Added support for fuel transaction provider, WEX Canada.
  - Fixed minor bugs and updated package.
- HOS
  - Added a new page to Feature Preview that helps Administrators quickly reassign unidentified drivers from the Unidentified Driving page in the UI. Supports filters, grouping, bulk assigning, and bulk annotating of unassigned logs.
  - Administrators can configure security clearances to allow Drive App users to ignore automatically generated HOS logs in-app.
  - Updated UI elements and removed non-applicable ELD related pop-ups for Australian Written Work Diary (WWD) users.

### • Asset Inspection Workflow

- Improved certification workflow based on jurisdiction. Removed completely for Canadian and Australian inspections. The US only requires certification for reported defects. Updated UI elements for repairing defects workflow, allowing drivers to proceed without depending on their security clearances.
- Asset inspections created within the Fleet Management Application display appropriate Canadian-specific fields.
- Exceptions made as a result of the built-in Asset Inspection Pre/Post trip rules will now be instantaneous, with a 0-second duration.

### • Drive - General Updates

- Drive Application users whose username is an email address can reset their password from the Login page.
- Added rulesets to support the Canadian Oil Well Service Vehicle Permits.

### 6.0.0

- Users
  - Updated Feature Preview to allow individual feature selection.
  - Added message for Administrators about devices impacted by the 3G sunset in versions 2103, 2104, and 6.0.0.
- Routes
  - $\circ~$  Updated the Route Edit page (Feature Preview).
  - Added predictive text for locations when the user enters a new address or waypoint (Feature Preview).
  - Added the name of the Route assigned to a vehicle to its information displayed on the map.
- Rules
  - Added new conditions for Accelerometer rules.
  - $\circ~$  Added new EV rules for the following cases:

- EV stops in a charging location, but does not start charging.
- Charging stops unexpectedly prior to completing the full charge.
- EV stops in a charging zone, but misses the opportunity to charge.
- Updated Exception Event page to allow users to write comments, upload attachments, add links, and dismiss events (Feature Preview).
- Added the ability for a parent group to publish their maintenance reminders to a subgroup.

### Engine & Maintenance

- Added a new page to monitor asset sensors (Feature Preview).
- Mobile
  - Added menu at the bottom of the screen.
  - Updated map layout.
- Map
  - Updated Map page to include Trips History and Route Completion as submenus under the main Map menu.

### • Dashboard & Analytics

- Released Active insights. The feature is out of Feature Preview.
- Reports
  - Removed DebugLocation column from the built-in Debug Log report.

### • General Improvements

- Updated text on Getting Started & Help to better reflect contacts for Live Chat, Support ticket, and training ticket.
- Updated text on the Security Clearances page from "Exceptions report" to "View exceptions". The map does not display Exceptions if the user does not have this security identifier.
- Improved the New Installed Devices page (Feature Preview).
- Added information about why a particular device needs replacement.
- Renamed "segment" to "zone" when importing Public Works Route Completion through a spreadsheet. Added description that the default pass count is 2.
- SDK
  - Fixed an issue with InvalidOperationException method in which session ID is accessed before it is assigned.
  - Removed a reference to Newtonsoft.Json from the NuGet package.
  - $\circ~$  Increased media file size limits to 50 MB for video and 10 MB for images.
  - Added CanadaNorthOf60CycleOneTeam and CanadaNorthOf60CycleTwoTeam to the rulesets.
  - Added interface to configure Wi-Fi hotspot on telematics devices.
  - The Administration SDK is now available online. Contact your Reseller for more information.
  - Changed the software version naming convention to use three parts (e.g., 6.0.0) from four parts (e.g., 2104).

### • Trip Categorization (BETA)

• This feature allows drivers to categorize their driving as either business or personal, and also allows Administrators to run a report that summarizes each driver's distance driven under each category.

### • General updates

• Added team rulesets for Canada, North of 60° latitude.

### 2021-04

### • UI Improvements

• Added Bookmarks feature to allow users to bookmark up to four pages.

- $\circ$   $\;$  Improved the Support page.
- Dashboard
  - Released the Dashboard Wizard. The feature is now out of Feature Preview.
- Mobile
  - Added feature to navigate to a specific vehicle on the mobile version.
- Rules
  - Released EV rules. The following rules are out of Feature Preview:
    - EV Low Charge
    - EV Enters Charging Zone with Low Charge
    - EV Exits Charging Zone with Low Charge
    - EV Done Charging
- Assets
  - Renamed Show button to Filter.
- Groups
  - Added a new built-in group called Driver Activity.
  - Added ability to designate whether an asset that belongs to a group should be known to all users within the organization.
- Reports
  - Added Trip Categorization built-in report.

### • General Improvements

- Added Trip Categorization built-in report.
- Added column for product description on fuel fill-up reports.
- Added an entry to the audit log to record user updates to engine data.
- Added an entry to the audit log to record user changes to measurement profiles.
- Added the ability to revert to the previous stop prior to the optimization when creating a route.
- Added support for bulk importing unplanned maintenance events.
- Added support for the advanced groups filter in reprocess requests.
- Released material management report and rules. The reports and rules are out of feature preview.
- Added pagination on the Users page
- Updated pagination on the Zones page.
- Updated canned message responses.
- Released Public Works Route Completion features and report. The features are now out of Feature Preview.
- Added ability to import Public Works routes in both .CSV format and Excel format.
- SDK
  - Updated the FuelTankCapacity to throw an ArgumentOutOfRangeException if the value is less than 0.
  - The DevicePlans property is being phased out.
  - Added the DevicePlanBillingInfo property to replace the DevicePlans property.
  - Fixed a bug that omitted the closestAssetLimit property when applying closestAssetLimit and resultsLimit together.
  - Fixed a bug that applied the wrong date when searching for UserHosRuleSet using both "fromDate" and "userSearch.fromDate".
  - $\circ~$  Added the ProviderProductDescription property to FuelTransaction.
  - Added EwdRest, EwdWork, and EwdWorkExemption to DutyStatusViolationType.
  - Removed provider-specific details from exception messages.
  - $\circ~$  Added IsHidden and IsRequired properties.
- Drive General Updates
  - Updated Asset Inspection attestation validation.

- Added Asset Inspection checklists to the application. These were added in the previous release, but were only accessible in the Drive App.
- Added interactive In-App Help functionality.
- Added exception notifications.

### • Drive — SDK and Add-in updates

- Added properties related to defect lists.
- Added support for linking assets together (such as linking a vehicle to a trailer, or linking a trailer to a generator).
- Fixed bug that returned the wrong date when searching for UserHosRuleSet using both fromDate and userSearch.fromDate parameters.

### 2021-03

### • Vehicles & Assets

- Enhanced the Asset Edit page (Feature Preview). Updated the tabs on the page to Asset, Health, Audio feedback, Extendable services, Rate plan, and Settings.
- Added support for barcode scanning to enter serial numbers on the mobile version.
- Updated the Installation History page.
- Renamed Links button to Installations.

### • Rules & Groups

- Added new Exceptions page (Feature Preview).
- Improved OEM data collection and processing capabilities to more accurately reflect OEM acceleration events.

#### • Map

- Updated the Nearest Assets functionality to provide the driving distance and an estimated time of arrival.
- Released the clustered Map view for all fleet sizes. The feature is now out of Feature Preview.
- Released the Area Activity search. The feature is now out of Feature Preview.

### • Engine & Maintenance

• Enhanced the Maintenance Reminders page. The updated functionality is now out of Feature Preview.

### • Reports

- Added new filter options to specify which audit types are included in the scheduled Audit Log report.
- Released Interactive Charts as a new way to display Excel reports.
- Added a new custom EngineStatusStatisticsGpsDistance column to the Fuel and EV Energy Usage report.
- Updated the Engine Status report to display data in the units of measure selected by the user.

### General Improvements

- Added a new End User License Agreement for databases on the Brazilian federation.
- Released Active Insights (Feature Preview) for all Customers.
- Implemented pagination for Assets, Users, and Zones pages.
- Changed sender name for automated emails.
- Released a demo database functionality named MyDemo.
- Included detailed Custom NFC edits to the audit log.
- Added field to select a jurisdiction when registering a new database.
- Released Extendable Services for all Customers. The feature is now out of Feature Preview.
- Added In-App Help, a self-serve, self-supporting help and onboarding center.
- Added AiModel Source to the Diagnostics page.

- Added LEVC (London Electric Vehicle Company) OEM faults.
- Added support for Shapefiles in Public Works route completion. Defined the Shapefile option as the default and disabled the Excel option in Route Import.
- Improved odometer and distance calculation.
- Removed decimals from the state of charge notification token value.

#### • SDK

- Updated <FuelTransaction> to register only unique entries when comparing all fields (excluding sourceData) for existing transactions.
- Added Jurisdiction property to CompanyDetails.
- Added jurisdiction value validation to the CreateDatabase API.
- Added "fuelTankCapacity" property to CustomVehicleDevice.
- Added "LevcFault" to DiagnosticType.
- $\circ~$  Added camera access support for the Drive App Add-in.
- Added CurrentDutyStatus property to DriverRegulation.
- Added EwdRest, EwdWork, and EwdWorkExemption to DutyStatusViolationType.
- Added LogTypes property to DVIRLogSearch.
- Added lastModifiedDate and state properties to ExceptionEvent to determine if the exception event is invalidated instead of deleted.
- Added includeInvalidated property to ExceptionEvent.
- Added object representing the state of the exception event to ExceptionEventState.
- Added a mocked function for camera API in generator-addin.
- Fixed instances where Group objects had color and children properties partially populated when nested in another object.
- Added CaliforniaPropertyShortHaul and CaliforniaPropertyShortHaulWithRest to HosRuleSet.
- Updated enumeration representing the Jurisdiction of a database.
- Added Application media file type to support PDF file types in MediaFiles.
- Removed RadioDownloader, RadioData, and related objects.
- Added the following SecurityIdentifiers:
  - ViewDeviceDataPrivacyChangeData and EditDeviceDataPrivacyChangeData
  - ViewSharedDevice
  - AdministerPropertySet, ViewPropertySet, AdministerProperty, and ViewProperty
  - ViewActiveInsights
  - IgnoreHOSLogs
  - ViewShareableLink, CreateShareableLink, and DeleteShareableLink
- $\circ~$  Added SearchArea property to TripSearch.

### • Asset Inspection

- Administrators can mark certain inspection items as Required, meaning that part cannot be ignored: it must be marked as safe or faulty by the user during inspection.
- Administrators can add Other as a defect option for any part, to account for any miscellaneous issues that might not be explicitly listed for that part.

### • Drive — General Improvements

- For ELD compliance, Administrators can no longer edit unverified logs.
- Added note to the Yard Move Exemption rule to clearly explain its limitations.
- Added validation for missing driver information (driver license number and/or driver state/province) when an administrator is configuring a driver.
- To comply with Canadian ELD regulations, added a message to the login/logout workflow if a driver has no available exemptions. Previously, the message only appeared if the driver had available exemptions.
- The critical defect banner (that indicates a critical defect was identified during a

previous inspection) is no longer displayed during a new Asset Inspection if the defect has already been repaired.

- Removed legacy UI messaging from the Drive App.
- Clock-in/Clock-out feature moved out of Feature Preview and added fully into the Drive App.
- Updated rulesets:
  - Updated the behavior of the following rulesets due to US regulation changes:
    - Oregon 70-hour/7-day
    - Oregon 80-hour/8-day
    - Nebraska 70-hour/7-day
    - Nebraska 80-hour/8-day
  - Added the following rulesets:
    - California Property Short-haul
    - California Property Short-haul with Rest Requirements
- Improved Drive App accessibility, following the Web Content Accessibility Guidelines.
- Updated ruleset selection UI for improved usability.

#### • Drive — SDK

- Added support to retrieve a driver's current duty status.
- Added support to search for an inspection log by type (pre-trip, post-trip, or in-trip).

#### Back to Top

Version	Date	Editor	Revisions	Approved by
1901	Jan 03, 2019	Product Editing Team	Incremental quarterly updates	Product Editor
1902	Apr 30, 2019	Product Editing Team	Incremental quarterly updates	Product Editor
1903	Aug 31, 2019	Product Editing Team	Incremental quarterly updates	Product Editor
1904	Oct 31, 2019	Product Editing Team	Incremental quarterly updates	Product Editor
2001	Mar 6, 2020	Product Editing Team	Incremental quarterly updates	Product Editor
2002	May 07, 2020	Product Editing Team	Incremental quarterly updates	Product Editor
2003	Sep, 2020	Product Editing Team	Incremental quarterly updates	Product Editor
2004	Dec 15, 2020	Product Editing Team	Incremental quarterly updates and template refresh	Product Editor
2101	Mar 09, 2021	Product Editing Team	Incremental quarterly updates and template refresh	Product Editor
2102	May 14, 2021	Product Editing Team	Incremental quarterly updates and template	Product Editor

			refresh	
2103	August 11, 2021	Product Editing Team	Incremental quarterly updates and template refresh	Product Editor
2104	October 18, 2021	Product Editing Team	Incremental quarterly updates and template refresh	Product Editor
6.0.0	December 07, 2021	Product Editing Team	Incremental quarterly updates and template refresh	Product Editor
7.0.0	March 04, 2022	Product Editing Team	Incremental quarterly updates and template refresh	Product Editor
8.0.0	May 25, 2022	Product Editing Team	Incremental quarterly updates and template refresh	Product Editor